NUTRITION MONITORING

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON DOMESTIC MARKETING,
CONSUMER RELATIONS, AND NUTRITION

AND THE

SUBCOMMITTEE ON DEPARTMENT OPERATIONS,
RESEARCH, AND FOREIGN AGRICULTURE

OF THE

COMMITTEE ON AGRICULTURE

AND THE

SUBCOMMITTEE ON
SCIENCE, RESEARCH AND TECHNOLOGY

OF THE

COMMITTEE ON
SCIENCE, SPACE, AND TECHNOLOGY
HOUSE OF REPRESENTATIVES
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NUTRITION MONITORING

THURSDAY, SEPTEMBER 21, 1989

House of Representatives; Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition; and Subcommittee on Department Operations, Research, and Foreign Agriculture; Committee on Agriculture, Joint With the Subcommittee on Science, Research and Technology; Committee on Science, Space, and Technology,

Washington, DC.

The subcommittees met, pursuant to notice, at 9:35 a.m., in room 1300, Longworth House Office Building, Hon. Charles Hatcher (chairman of the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition) presiding.

Present from the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition: Representatives Hatcher, Sarpalius, Emerson, Lewis, and Herger.

Present from the Subcommittee on Department Operations, Research, and Foreign Agriculture: Representatives Brown, Volkmer, Roberts, Grandy, and Walsh.

Present from the Subcommittee on Science, Research and Technology: Representatives Walgren, Brown, Browder, Boehlert, and Schneider.

Staff present from the Committee on Agriculture: John E. Hogan, minority counsel; Glenda L. Temple, clerk; Julia Paradis, Dean Mitchell, William A. Stiles, Jr., Antia R. Brown, James A. Davis, Lynn Gallagher, and John J. Aquirre.

Staff present from Committee on Science, Space, and Technology: David J. Goldston, Republican special assistant, SRT; Grace L. Ostenso, staff director, SRT; and Christopher Roosa, Republican assistant legislative director.

Mr. **Hatcher**. The hearing will come to order. I would like to welcome all of you to this hearing on the important issue of nutrition monitoring. At this time, I will submit my prepared statement for the record, then I will recognize Congressman Brown for an opening statement, if he has one.

[The prepared statement of Mr. Hatcher follows:]

OPENING STATEMENT
BY THE HONORABLE CHARLES HATCHER
CHAIRMAN, SUBCOMMITTEE ON DOMESTIC MARKETING,
CONSUMER RELATIONS, AND NUTRITION
HOUSE COMMITTEE ON AGRICULTURE
SEPTEMBER 21, 1989

I AM PLEASED TO BE PARTICIPATING IN THIS JOINT SUBCOMMITTEE HEARING ON THE IMPORTANT ISSUE OF NUTRITION MONITORING. AS CHAIRMAN OF THE SUBCOMMITTEE ON DOMESTIC MARKETING, CONSUMER RELATIONS, AND NUTRITION, I NEED ACCESS TO TIMELY AND ACCURATE INFORMATION ON THE NUTRITIONAL STATUS OF THE AMERICAN PEOPLE.

WE ARE HERE TODAY TO DISCUSS THE NEED FOR A COMPREHENSIVE SYSTEM TO COORDINATE THE NUTRITION MONITORING ACTIVITIES OF THE FEDERAL GOVERNMENT. ALTHOUGH VARIOUS SURVEYS HAVE BEEN CONDUCTED OVER THE YEARS, PRIMARILY BY THE U.S. DEPARTMENTS OF AGRICULTURE AND HEALTH AND HUMAN SERVICES, THERE HAS NEVER BEEN INTEGRATION OF THESE SURVEYS. A SYSTEM THAT WOULD COORDINATE THE SURVEYS WOULD HELP US LEARN THE NUTRITIONAL STATUS OF THE VARIOUS POPULATION SUBGROUPS IN THE UNITED STATES. THIS KNOWLEDGE WOULD BE INVALUABLE TO THOSE OF US WHO HAVE RESPONSIBILITY FOR THE FEDERAL NUTRITION PROGRAMS.

I'D LIKE TO GIVE YOU AN EXAMPLE SHOWING WHY A NUTRITION MONITORING SYSTEM IS NEEDED. WHEN THE SUBCOMMITTEE ON DOMESTIC MARKETING, CONSUMER RELATIONS, AND NUTRITION HELD A HEARING IN

MAY OF THIS YEAR ON HUNGER IN RURAL AMERICA, IMPORTANT INFORMATION WAS NOT AVAILABLE, INFORMATION THAT WOULD HELP US UNDERSTAND WHERE THE PROBLEMS ARE THAT CONTRIBUTE TO RURAL HUNGER. I ASKED DR. HEIMBACH OF THE HUMAN NUTRITION INFORMATION SERVICE WHAT PERCENTAGE OF THE INCOME OF THE AVERAGE POOR RURAL HOUSEHOLD IS SPENT ON FOOD AND HOW FOOD COSTS DIFFER BETWEEN RURAL AND URBAN AREAS. THE ONLY DATA HNIS HAS TO ANSWER THESE QUESTIONS WAS COLLECTED IN 1977 AND 1978, AND DR. HEIMBACH ACKNOWLEDGED THAT MAJOR CHANGES SINCE THAT TIME HAVE MADE THAT DATA OBSOLETE. IT IS VERY DIFFICULT FOR US TO KNOW THE MOST EFFICIENT AND EFFECTIVE WAY TO ADDRESS THESE VITAL NUTRITION ISSUES IF WE DON'T HAVE ACCURATE AND TIMELY INFORMATION.

IT IS UNFORTUNATE THAT LEGISLATION ESTABLISHING A COORDINATED, COMPREHENSIVE SYSTEM OF NUTRITION MONITORING WAS VETOED LAST YEAR BY PRESIDENT REAGAN. I SHARE THE CHAIRMAN'S COMMITMENT TO DOING EVERYTHING WE CAN TO ASSURE ENACTMENT OF SUCH LEGISLATION. I LOOK FORWARD TO THE TESTIMONY OF OUR WITNESSES ON THIS IMPORTANT ISSUE.

OPENING STATEMENT OF HON. GEORGE E. BROWN, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **Brown**. Thank you very much, Mr. Chairman.

This morning we are meeting in a rather unique joint hearing between three subcommittees of two different full committees. The topic under review is the actions needed to establish a coordinated and comprehensive National Nutrition Monitoring and Research Program.

This is an effort which I and a number of others have directed a great deal of energy over the past several years. In fact, it goes back at least 10 years. And we have been seeing a need for the various pieces of nutrition monitoring and research underway in various Federal agencies to be better coordinated, which, of course is a goal that everybody agrees to; we just have different ideas as to how we do it.

With so much attention being paid to the relationship between diet and health, food safety, and other dietary and nutrition issues, it is imperative that we do a much better job of making sure that the various pieces of information and research results can be fitted together to ensure sound Federal policy.

To this end, in the last Congress, we sent a bill to the White House to accomplish this, but the legislation was pocket vetoed. We now have before us two bills designed to better coordinate Federal programs in this area and these are the subject of today's hearings.

This is not a new topic for any of the subcommittees involved, so that I will not spend time providing background on our efforts and the need for this legislation. I would like to note that the Senate Committee on Governmental Affairs has reported legislation on this topic, and it is my hope that the committees represented here today can move rapidly on a companion to that Senate passed bill.

I thank you, very much, Mr. Chairman.

Mr. **Hatcher**. Representative Walgren.

OPENING STATEMENT OF HON. DOUG WALGREN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. **Walgren**. Thank you, Mr. Chairman.

I would like to have unanimous consent that an opening statement might be put into the record at this point. I would say that I am very pleased that we are here, although here again, with the Subcommittee on Department Operations, Research, and Foreign Agriculture, and the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition of the Committee on Agriculture, together with our Science, Research and Technology Subcommittee, from the Committee on Science, Space, and Technology.

As Mr. Brown has said, this is not a new subject. It goes back to 1969, when the first White House Conference on Food Nutrition and Health called for improvements in the nutrition monitoring system that we work with in our country.

It is over the years, since then, that there have been repeated judgments made by task forces of various kinds that a more coordinated and a more logical effort be made in nutrition monitoring.

We spend a lot of money in nutrition research and nutrition monitoring is obviously central to the effectiveness of that expenditure. We spend, as a Nation, some $356 million on nutrition research; the Department of Agriculture spends $67 million in the most recent year; the Department of Health and Human Services spends $280 million in the most recent year.

And so, the question, I think for us, is what level of coordination and common enterprise would the public expect us to bring to the expenditure of that amount of money. We have an obligation for good management. And, clearly, when we look back at this area and see: the lack of communication between the various agencies involved, and the disconnects and the failures to use comparable data, let alone the failure of a common effort to bring current scientific and the best scientific and technological advice to this system that we use, I think that we are failing in that obligation to the public of good management.

And so, this area has been, in a sense, coming together. Last year, we passed a bill in the House of Representatives very similar to the two proposals that are before our committees today, 311 to 85, on the floor of the House. The Senate passed the same bill unanimously. And it only failed at becoming law because of a pocket veto by President Reagan.

So, we are getting close, Mr. Chairman, and I really look forward to working with you and your colleagues on the Committee on Agriculture from our side on the Committee on Science, Space, and Technology, and I hope that we can make it real this year.

Thank you, Mr. Chairman.

[The statement of Mr. Walgren follows:]

OPENING STATEMENT
HONORABLE DOUG WALGREN (D-PA)
CHAIRMAN, SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

JOINT HEARING ON NATIONAL NUTRITION MONITORING LEGISLATION

September 21, 1989

I AM PLEASED THE SUBCOMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH AND FOREIGN AGRICULTURE AND THE SUBCOMMITTEE ON DOMESTIC MARKETING, CONSUMER RELATIONS, AND NUTRITION OF THE COMMITTEE ON AGRICULTURE HAS JOINED WITH THE SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY IN THESE HEARINGS. THE SUBJECT OF AN EFFECTIVE NATIONAL NUTRITION MONITORING SYSTEM IS NOT A NEW PUBLIC POLICY ISSUE TO ANY OF OUR SUBCOMMITTEES.

THE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY AND THE COMMITTEE ON AGRICULTURE, IN CONCURRENCE WITH THE COMMITTEE ON ENERGY AND COMMERCE, HAVE BROUGHT NATIONAL NUTRITION MONITORING LEGISLATION TO THE HOUSE FOR CONSIDERATION DURING THE PAST SEVERAL CONGRESSES. IN THE 100TH CONGRESS, THE HOUSE PASSED LEGISLATION SIMILAR TO THAT BEFORE US TODAY BY A VOTE OF 311 TO 85. THE SENATE PASSED THE BILL BY UNANIMOUS CONSENT. A PUBLIC LAW TO ENHANCE NATIONAL NUTRITION MONITORING AND RELATED RESEARCH COULD BE IN PLACE TODAY, IF PRESIDENT REAGAN HAD NOT POCKET VETOED THE BILL LAST NOVEMBER.

IN 1969, THE WHITE HOUSE CONFERENCE ON FOOD, NUTRITION AND HEALTH CALLED FOR IMPROVEMENTS IN THE NATION'S NUTRITION MONITORING SYSTEM. SINCE THAT TIME NUMEROUS REPORTS OF SCIENTIFIC AND PUBLIC HEALTH ORGANIZATIONS, AS WELL AS ADVISORY GROUPS TO THE EXECUTIVE BRANCH, HAVE

IDENTIFIED THE NEED FOR ENHANCING THE EXISTING SYSTEM AND HAVE DEVELOPED RECOMMENDATIONS FOR INCREASING THE VALUE OF THE SYSTEM AND THE EFFECTIVENESS OF THE FEDERAL RESOURCES EXPENDED.

FOR EXAMPLE: IN JULY, 1986 THE FIRST REPORT ON NUTRITION MONITORING IN THE UNITED STATES, PREPARED BY THE DHHS/USDA JOINT NUTRITION MONITORING EVALUATION COMMITTEE RECOMMENDED THAT CHANGES BE MADE TO: "IMPROVE INFORMATION EXCHANGE BETWEEN DATA USERS AND GATHERERS; INCREASE USE OF DATA COLLECTED UNDER THE NATIONAL NUTRITION MONITORING SYSTEM; IMPROVE METHODS AND TECHNIQUES FOR GATHERING INFORMATION FOR ASSESSING NUTRITIONAL STATUS; AND INCREASE RESOURCES FOR THE NATIONAL NUTRITION MONITORING SYSTEM."

THE JULY, 1988 SURGEON GENERAL'S REPORT ON NUTRITION AND HEALTH STATED: "IMPRESSIVE EVIDENCE ALREADY LINKS NUTRITION TO CHRONIC DISEASE. HOWEVER, MUCH MORE INFORMATION IS NEEDED TO CONTINUE TO IDENTIFY CHANGES IN THE NATIONAL DIET THAT WILL LEAD TO BETTER HEALTH FOR THE NATION. GAPS IN OUR KNOWLEDGE OF NUTRITION SUGGEST FURTHER RESEARCH AND SURVEILLANCE NEEDS."

THE MARCH, 1989 REPORT OF THE NATIONAL RESEARCH COUNCIL/NATIONAL ACADEMY OF SCIENCES ENTITLED, DIET AND HEALTH: IMPLICATIONS FOR REDUCING CHRONIC DISEASE RISK, RECOMMENDED: "IMPROVEMENT OF THE METHODOLOGY FOR COLLECTING AND ASSESSING DATA ON THE EXPOSURE OF HUMANS TO FOODS AND DIETARY CONSTITUENTS THAT MAY ALTER THE RISK OF CHRONIC DISEASES."

IN APRIL, 1989, THE HUMAN NUTRITION BOARD OF SCIENTIFIC COUNSELORS, A USDA ADVISORY BODY, ADOPTED SEVERAL RESOLUTIONS RELATING TO NUTRITION MONITORING WHICH URGED THE SECRETARY OF AGRICULTURE TO SUPPORT LEGISLATION TO ESTABLISH A PLAN FOR A NATIONAL NUTRITION MONITORING SYSTEM, PROVIDE A MECHANISM FOR INTERDEPARTMENTAL COORDINATION OF THE VARIOUS PARTS OF SUCH A SYSTEM, AND PROVIDE FOR COOPERATION BETWEEN FEDERAL AND STATE SYSTEMS.

TODAY, DHHS AND USDA ARE RELEASING THE SECOND REPORT ON NUTRITION MONITORING IN THE UNITED STATES WHICH WAS COMPLETED UNDER CONTRACT BY THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY. THE RECOMMENDATIONS ARE VERY SIMILAR TO THOSE OF THE FIRST REPORT IN 1986 AND CONCLUDE THAT, "-- IT IS APPROPRIATE

NOW TO BEGIN EFFORTS TO DETERMINE THE MOST USEFUL FORM OF THE (NATIONAL NUTRITION MONITORING SYSTEM) NNMS IN THE FUTURE." THE REPORT ALSO NOTES THAT, "IN ADDITION, BOTH THE USDA AND DHHS HAVE DEVELOPED PLANS FOR SURVEY ACTIVITIES, TO A LARGE EXTENT, THROUGH 1995; THUS, RECOMMENDATIONS OFFERED NOW MAY NOT BE IMPLEMENTED FOR SOME TIME." THIS STATEMENT EXEMPLIFIES THE HISTORY OF NATIONAL NUTRITION MONITORING - RECOMMENDATIONS ARE OUT-OF-PHASE WITH PLANS OR ARE NOT INCLUDED; AND IMPLEMENTATION AND OPERATIONAL PLAN AFTER PLAN ARE DEVELOPED, BUT THE ULTIMATE GOALS ARE SELDOM ACHIEVED.

THE REAGAN ADMINISTRATION TESTIFIED THAT MUCH OF THE PROGRESS MADE IN THE NUTRITION MONITORING SYSTEM OVER THE PAST EIGHT YEARS WAS MOTIVATED BY THE THREAT OF A PUBLIC LAW

SUCH AS THOSE WE ARE CONSIDERING TODAY. HOWEVER, THAT PROGRESS WAS MADE IN A PIECE-MEAL FASHION. A COMPREHENSIVE SYSTEM TO MEET THE NUTRITIONAL AND HEALTH DATA NEEDS OF THE TWENTY-FIRST CENTURY AND TO ENSURE THAT PUBLIC FUNDS ARE NOT WASTED ON OBSOLETE AND INEFFECTIVE SYSTEMS IS LONG OVERDUE.

BEFORE FURTHER PATCHWORK PLANS ARE FUNDED, THE CONGRESS AND THE EXECUTIVE BRANCH MUST ASSURE A PLAN IS IN PLACE THAT WILL MEET TODAY'S NEEDS, USE TODAY'S TECHNOLOGY AND SCIENTIFIC KNOWLEDGE, INCORPORATE THE ADVISE OF SCIENTIFIC EXPERTS, INCLUDE THE RESEARCH NECESSARY TO PROVIDE ACCURATE AND VALID DATA, AND REFLECT THE MILESTONES AND RESOURCES NECESSARY TO ACCOMPLISH THE GOALS OF AN EFFICIENT AND EFFECTIVE NATIONAL NUTRITION MONITORING SYSTEM. THESE ESSENTIAL FEATURES

WERE THE OBJECTIVE OF THE LEGISLATION PASSED BY THE 100TH CONGRESS AND ARE THE PURPOSE OF THE PROPOSED LEGISLATION BEFORE US TODAY.

I AM COMMITTED TO WORK TOWARD THE ENACTMENT OF LEGISLATION WHICH WILL ASSURE THAT A COMPREHENSIVE NATIONAL NUTRITION MONITORING SYSTEM IS IN PLACE AND THAT CONGRESS HAS THE TOOLS NECESSARY TO EXERCISE ITS OVERSIGHT RESPONSIBILITY FOR THESE IMPORTANT ACTIVITIES. I LOOK FORWARD TO THE RECOMMENDATIONS OF OUR DISTINGUISHED WITNESSES TODAY.

Mr. HATCHER. Thank you, Mr. Walgren.

Mr. Emerson.

OPENING STATEMENT OF HON. BILL EMERSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

Mr. EMERSON. Thank you, Mr. Chairman. Our hearing today is on the subject of nutrition monitoring and this subject has been before our committee and the Congress for the past several years. Last year, we passed a bill, S. 1081, which I supported that was pocket vetoed, as the gentleman just referred to, by President Reagan, because he believed that the bill "would create a substantial amount of unnecessary and complex Federal bureaucracy that would hamper the achievement of the bill's goals."

Nutrition monitoring legislation, with which I have been involved, began in 1984 with H.R. 4686. That bill was defeated on the floor of the House under suspension. In 1986, the House passed a nutrition monitoring bill, but the Senate did not complete action on the measure and the effort died with the 99th Congress. In 1987 and 1988, nutrition monitoring legislation was again considered by the Congress. Both houses passed a nutrition monitoring bill which was later pocket vetoed by the President and that is where we are today.

Nevertheless, we are now here to review the status of nutrition monitoring. There are two bills that have been introduced this year in the House, H.R. 1608 and H.R. 677. These are similar bills, both of which have, as their goals, the improvement and coordination of nutrition monitoring activities by the Federal Government.

This issue is one, as I mentioned earlier, that has been before us for a number of years. Maintenance of a proper diet, with good nutrition habits, plays a vital role in our Nation's health. Additionally, knowing the patterns of food consumption assists the Federal Government in linking food production to human nutrition and food needs. It is important that the information gathered by Federal agencies be coordinated and analyzed so that the goal of improvement in the health of Americans through good diets can be achieved.

It is my hope that we will pass a bill in this Congress to improve our nutrition monitoring system and provide more accurate, and up-to-date information on the nutritional status of Americans. It must be noted that since 1977 the Federal Government has been moving toward the creation of a national nutrition monitoring system.

There are two national surveys that are the basis for data concerning the nutritional status of Americans—the National Food Consumption Survey conducted by the USDA; and the Health and Nutrition Examination Survey conducted by HHS. These are national surveys of a sample, just a sample, of the population that is representative of the entire population.

But those are useful in that they identify the general well-being of the population and provide reference points by which other surveys of more limited scope can be evaluated. Also the USDA initiated a new type of survey, in 1985, entitled the Continuing Survey of Food Intakes by Individuals. A nationally representative sample of women from 19 to 50 years of age, at all income levels and their children, from ages 1 to 5, were surveyed for the dietary intake and eating habits for 12 months A similar survey was conducted for low-income women and children. This is an important survey because it provides timely information of the adequacy of the diets of a selected group of people and an early indication of dietary change.

Such information, coupled with the work of both the Departments of Agriculture and the Health and Human Services will serve to improve our knowledge, and the programs aimed at bettering the lives of all Americans. No one can conclude that the Federal Government is not active in the area of nutrition monitoring. Nevertheless, improvements can and should be made.

Legislation to accentuate the activities of the Federal Government and to provide the American people with a clear and comprehensive program aimed at assessing the nutritional status of our people is needed.

Another important issue related to nutritional monitoring is that of dietary guidance. We must ensure that the Federal Government speaks with one voice when it disseminates information on dietary guidance to Americans.

The Departments of Agriculture and HHS must publish the document—Dietary Guidelines for Americans—at least every 5 years. In addition, there should be a procedure whereby all dietary guidance issued by Federal agencies, in whatever format, are consistent with the approved dietary guidelines for Americans, and that the Federal agencies are not out in left field when advising Americans of proper and healthful diets.

Mr. Chairman, I thank you for holding these hearings today and I look forward to hearing our witnesses and welcome their participation and I am glad that we are joined by other colleagues here, in addition to our own subcommittee.

Mr. HATCHER. Thank you, Mr. Emerson.

Mr. Boehlert.

Mr. BOEHLERT. Thank you, Mr. Chairman.

First of all, I have a statement that I would like to insert in the record for the ranking minority member of my full committee, Mr. Walker.

[The statement of Mr. Walker follows:]

OPENING STATEMENT OF HON. ROBERT S. WALKER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. Chairman, no one denies that in the past the federal government had significant problems obtaining and evaluating data collected as part of the nutrition monitoring network.

The question before us today is the extent to which those problems remain and whether any legislative remedy is necessary to solve them.

I believe the agencies responsible for nutrition monitoring have made impressive progress at coordinating, improving and expanding the nation's nutrition monitoring system. Legislative meddling at this point is likely only to increase the expense of the program and create new antagonisms.

I fail to see how requiring yet another plan with detailed and potentially costly program requirements will further the goals of the bill's sponsors. I fail to see how setting up a formal outside body will do anything but slow progress in a program that has already greatly increased its efforts to gather information and views from all interested parties. This bill will do nothing more than require more meetings, more paperwork, more bureaucracy and eventually more money.

I agree wholeheartedly with the goals of those supporting nutrition monitoring legislation; we need more and better nutrition information and to make fuller use of existing surveys. I don't believe legislation is needed to accomplish that.

OPENING STATEMENT OF HON. SHERWOOD L. BOEHLERT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. BOEHLERT. Then I would like to add my welcome to the fourth annual hearing on nutrition monitoring. This is becoming kind of a cult ritual for many of us. We get together each year and mumble the same phrases and go through the same exercises, and each time we admit one or two new witnesses and a few new Members of Congress to our club. It is sort of the congressional equivalent of a fraternity hazing.

I had hoped last year that this hazing would become a thing of the past. In 1988, we further revised the National Nutrition Monitoring and Related Research Act; reached agreement among all the disparate interested groups, and the House and Senate passed the bill by overwhelming margins. But President Reagan vetoed it.

The veto message seemed to be talking about a different bill than the one that we passed. It criticized the inclusion in the bill of a nutrition coordinator—a position that is entirely at the discretion of the administration. It claimed the bill would vastly increase spending on nutrition monitoring—not a bad idea, but not a requirement of the bill. Nothing in the nutrition plan could be implemented without further review and action by Congress.

The only sore point that had any basis in the legislation was concern about the advisory council. Now, I am not a big fan of advisory councils, in general. Too often, they waste time and give greater entree to individuals and groups that already have excessive influence over the government.

But I have to say in this case, I just don't understand what all the fuss is about. The advisory committee costs little and will bring together the diffuse groups and interests that nutrition monitoring is designed to benefit. I would think such feedback would be useful.

I do not want to be theological about this, but I am interested in hearing out today's witnesses on this point. But the burden of proof rests with those who oppose the council.

I hope we can settle these issues today and save future generations of officials the trouble of attending a fifth annual hearing on this subject.

The nutrition monitoring system has improved over recent years, but more work is needed. The current controversy over diet and cholesterol, sparked by this month's "Atlantic," demonstrates just how much Americans rely on Federal nutrition information and how much more information and analysis we need.

I hope this hearing will signal that we are ready to end the 5-year food fight over legislation and return to the labs.

Thank you, Mr. Chairman.

Mr. HATCHER. Mr. Walsh, do you have an opening statement?

Mr. WALSH. I have no opening statement.

Mr. HATCHER. Without objection, any member who wishes to submit a written statement, it will be admitted to the record.

First, we have a panel of two or maybe three. I would like to introduce Dr. J. Michael McGinnis, Deputy Assistant Secretary for

Health, Disease Prevention and Health Promotion of the Department of Health and Human Services, and we would welcome you, doctor; and Ms. Ann Chadwick, who is Acting Assistant Secretary for Food and Consumer Services, U.S. Department of Agriculture. We welcome you and we will hear from you in the order in which I introduced you and reserve questions until after each of you have testified.

Ms. Chadwick, will you first introduce the person with you?

Ms. CHADWICK. Yes, Mr. Chairman, accompanying me today is Dr. James Heimbach, who is the Acting Administrator of the Human Nutrition Information Service.

Mr. HATCHER. Thank you and for this panel and other witnesses who are here, your written statements will be made a part of the record, and you will be allowed to proceed by reading your statement, paraphrasing it or however you wish.

STATEMENT OF J. MICHAEL McGINNIS, M.D., DEPUTY ASSISTANT SECRETARY FOR HEALTH, DISEASE PREVENTION AND HEALTH PROMOTION, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, ACCOMPANIED BY CATHERINE WOTEKI, DEPUTY DIRECTOR, DIVISION OF HEALTH EXAMINATION STATISTICS, NATIONAL CENTER FOR HEALTH STATISTICS, CENTERS FOR DISEASE CONTROL

Dr. McGINNIS. Mr. Chairman and members of each of the subcommittees, thank you, very much, for inviting the testimony of the Department of Health and Human Services at this important hearing on nutrition monitoring. It may be the fourth annual hearing, but it is important to keep our eye on the ball and to keep reminding us of the progress that is still to be made in the area.

I am very pleased to represent Secretary Sullivan and the Department in my capacity as Chairman of the DHHS Nutrition Policy Board. With me today are Dr. Cathie Woteki, from the Centers for Disease Control and the National Center for Health Statistics; and Dr. Darla Danford, from the National Institutes of Health; Dr. Elizabeth Yetely, from the Food and Drug Administration; and Dr. Linda Meyers from my own office, who will be able to assist as well with follow-up questions.

If I may, I would like to submit my formal testimony for the record and speak less formally, giving emphasis to certain key points.

Mr. HATCHER. Without objection.

Dr. McGINNIS. Thank you, very much.

The points that I would like to emphasize are three, related to first, the importance of nutrition for health status; second, the key role of nutrition monitoring in our efforts; and third, the steps we are taking to improve those efforts.

With respect to the first point, I think it is fair to say that at no time have we had a greater appreciation, based on solid scientific evidence, of the importance of dietary patterns to the human experience with health and disease.

In less than a 12-month period, two reports of unprecedented breadth and depth—the Surgeon General's Report on Nutrition and Health, and the National Research Council's Report on Diet and Health—came to essentially the same conclusion about the strength of diet's contribution, in particular to the occurrence of 5 of the 10 leading causes of death for Americans.

As a representative of the Public Health Service, I would like to summarize the key conclusions of the Surgeon General's Report on Nutrition and Health, that are relevant for today's hearing. And that is first, I think there are three conclusions in this respect. The first is, and I really quote from the first page of the report, that for the 2-out-of-3 adult Americans who do not smoke and do not drink excessively, dietary choice seems to influence long-term health prospects more than any other personal choice.

Second, there is a convergence of recommendations from the perspective of several chronic diseases; that is, similar dietary patterns affect the risk for several chronic diseases together.

And third, clearly emerging as the primary priority for dietary change is the recommendation to reduce total intake of fats, especially saturated fats because of their relation to several important chronic disease conditions.

In sum, we have got powerful motivations to strengthen our nutrition efforts across the board.

Second, better nutrition monitoring is key to our progress in this area. If we are to accomplish our goals and objectives with respect to nutrition improvement, and if we are to deepen our understanding about the ways in which dietary factors affect health status, we must have a solid information base as a point of departure and as a means of assessing our progress.

That means doing better with respect to the extent to which our surveys reflect actual food consumption; with respect to the extent to which those surveys facilitate our understanding of the linkages of dietary patterns and physiologic outcomes; with respect to the extent to which the data from survey-to-survey, reinforce and complement each other; with respect to the extent they afford reliable insights of trends over time; with respect to the extent to which they allow us an understanding of the special problems of certain population groups.

Elements of each of these are discussed in our second report on Nutrition Monitoring in the United States, and on behalf of both the Department of Health and Human Services, and the Department of Agriculture, I would like to make available to the chairman of each of the subcommittees, copies of this report which will be released later on this month.

Third, we are making progress in the attempt to address the issues that I have just mentioned. My testimony, the formal written testimony, refers to the roughly $50 million devoted to nutrition monitoring through the work of our National Institutes of Health; our Food and Drug Administration; Centers for Disease Control, and its National Center for Health Statistics in DHHS; and the nearly 30 surveys that are involved in that respect.

When I was with you last year, at, I guess, what would be termed the third annual hearing on this subject, and I summarized some of the steps that we were taking. But I would like to briefly bring you up to date on what has happened since then. And there is progress.

First, and perhaps most significant in many ways, is the establishment in June 1988, of an administrationwide Interagency Committee on Nutrition Monitoring [ICNM] made up of 13 departments and agencies across the Federal Government and cochaired by the relevant Assistant Secretaries from the Department of Health and Human Services, and the Department of Agriculture.

Several subcommittees, four specifically, have been formed as a result of the work of the parent body on survey complementarity, on food composition in an effort to facilitate communication with users, and on Federal-State relations.

The group meets quarterly, in addition to regular staff meetings on the part of the USDA and HHS staff. Though publications are not a goal of the ICNM. I am pleased to note and to provide for committee members, the first publication of the ICNM which is a directory of Federal Nutrition Monitoring activities. This lists in detail all efforts in the Federal Government in nutrition monitoring, in the key categories, that is, the categories related to health and nutrition status measurements; to food and nutrient consumption measurements; food composition; dietary knowledge and attitudes; and food supply determinations.

Second, in terms of the progress that has been made, NHANES III, has gotten underway as of the fall of 1988, with special sampling of infants, children, the elderly and minority populations to give us better and more accurate insights into the nutritional conditions of those groups. I would like to recognize, in particular, the help that the people of Allegheny County, Mr. Walgren, have given us for the activities. NHANES III is currently conducting examinations in Allegheny County and Mr. Brunwasser and his colleagues in the Health Department, have provided space on their lot for our trailers as well as helping out with the activities in the many details which make for a successful survey. They were equally helpful when the HIV prevalent survey was pilot tested in Allegheny County in January. And I hope that you will pass that along to them.

Related to NHANES III, I want to point out that it includes food security questions to give information on our concerns about food access constraints that may not be widespread but are clearly unacceptable for a society such as ours, with the level of affluence that we have.

Fourth, the Centers for Disease Control has initiated a pilot survey activity on severe pediatric undernutrition. Again, this is not a widespread problem but it is a problem that is intolerable in our society and each case must be investigated thoroughly. We want to develop a system to do that effectively.

Fifth, we are working to develop core indicators for low-income populations; that is, core indicators that could be used in our surveys targeted to low-income populations to give us better information on those high risk groups and that is being done through the work of some of the major professional societies on nutrition in the country.

Lastly, in the dietary guidelines issue, which was mentioned in several opening statements, it is important to point out that we have initiated between the two departments, USDA and HHS, the work of the Dietary Guidelines Advisory Committee and we hope, indeed to have a revised version of those guidelines out next year, roughly at the 5-year interval that has been suggested.

Though I am very pleased to share with you this progress, Mr. Chairman, we are not complacent in our accomplishments, and we are eager to improve and appreciate the committee's interest, and my colleagues and I will be happy to answer questions at the conclusion of Ms. Chadwick's testimony.

[The prepared statement of Dr. McGinnis appears at the conclusion of the hearing.]

Mr. HATCHER. First, let us see if any of the other members have opening statements. Ms. Schneider, do you have a statement?

Ms. SCHNEIDER. No, Mr. Chairman.

Mr. HATCHER. Mr. Lewis.

Mr. LEWIS. I have a statement, Mr. Chairman.

Mr. HATCHER. Without objection, it will be entered into the record.

[The statement of Mr. Lewis follows:]

OPENING STATEMENT OF HON. TOM LEWIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Thank you Mr. Chairman. I want to compliment you for calling this hearing to address the issue of a Comprehensive National Nutrition Monitoring System. I am pleased to see that the Agriculture Committee is exercising its jurisdiction and moving forward to establish a nutrition plan under the Department of Agriculture and the Department of Health and Human Services. This plan will serve as a guide for nutrition monitoring, education and research.

I look forward to the testimony from today's witnesses and I hope to hear that they will work with us so that we can pass legislation that is acceptable to the Departments, as well as the administration.

Thank you, Mr. Chairman.

STATEMENT OF ANN CHADWICK, ACTING ASSISTANT SECRETARY, FOOD AND CONSUMER SERVICES, U.S. DEPARTMENT OF AGRICULTURE, ACCOMPANIED BY JAMES HEIMBACH, ACTING ADMINISTRATOR, HUMAN NUTRITION INFORMATION SERVICE; ROBERT RIZEK, DIRECTOR, NUTRITION MONITORING DIVISION; AND SUSAN WELSH, DIRECTOR, NUTRITION EDUCATION DIVISION

Ms. CHADWICK. Thank you, Mr. Chairman, and members of the committees. I do thank you for the opportunity to discuss the Department's nutrition monitoring and dietary guidance activities and to comment on H.R. 1608 and H.R. 677.

The Department of Agriculture has a serious commitment both to nutrition monitoring and to provide to the public the best, most up-to-date dietary guidance possible. We are committed to working diligently to improve the Government's effectiveness in both of these areas and we welcome expert advice and recommendations.

While we do not dispute that there is plenty of room for improvement in the national nutrition monitoring system, we do believe that the very real progress that we have made has some times been overlooked.

In response to congressional direction, we include a special sampling of low-income households in all of our surveys. We have responded to recommendations for continuous data collection by reinstating the Continuing Survey of Food Intakes by Individuals. These surveys have been redesigned to obtain information from all members of the household. This survey began this spring and will continue at least through 1996, supporting continuous updating of the data on the dietary status of the population and of population subgroups using moving average reporting.

We introduced the Diet Health Knowledge Survey as follow-on to the continuing survey to serve expressed needs for attitude and knowledge information to accompany food and nutrient intake data. Our ability to link data between the Nationwide Food Consumption Surveys and the National Health and Nutrition Examination Survey has been improved. They remain separate surveys, as they should, because they serve different program needs, but changes have been made where appropriate to improve comparability.

We have formed the Interagency Committee for Nutrition Monitoring, as Dr. McGinnis mentioned, to provide central direction for improving coordination across the dozens of component parts of the nutrition monitoring system, numerous surveys conducted by different agencies, as well as nonsurvey components such as the National Nutrient Data Bank, the U.S. Food Supply Series, and the vital statistics system.

These different components are designed not to duplicate or parallel each other, but rather to complement each other, to provide the full range, or to cover the full range of information needed to fully monitor the dietary and nutritional status of Americans. We have made progress and it is critical that any legislation provide for continued improvement within available funding and staff resources.

We believe that with a few modifications, H.R. 1608 will better enable us to continue the progress that we have made in the past several years. H.R. 1608 would legislatively establish the national nutrition monitoring system, without causing our limited resources to be diverted from the timely collection, analysis and release of data into less productive activities. This has been and remains our objection to H.R. 677.

Turning to dietary guidance, we believe that H.R. 1608 should be amended to remove the undesirable veto arrangement on the issuance of dietary guidelines, but we fully support the concept of interagency cooperation to assure that not only the advice that we give to the public is scientifically correct and reflects current knowledge of the role of diet in promoting health, but also that we all provide consistent guidance.

Again, much progress has been made. A representative from the Department of Health and Human Services sits on our Dietary Guidance Working Group, which reviews all dietary guidance prior to its release by the Department of Agriculture. And an Agriculture representative sits on the Department of Health and Human Services dietary guidance committee.

The Federal Dietary Guidelines Advisory Committee, a nine-member panel jointly appointed by the two departments, was established this spring to review the Dietary Guidelines for Americans and to recommend revisions.

Promoting the Dietary Guidelines for Americans has been a major activity of the Department of Agriculture. One recent effort is the campaign, Eating Right the Dietary Guidelines Way, which features four new bulletins to help Americans follow the dietary guidelines. The bulletins and the kit that we have distributed to the members of the committees are published by the Department of Agriculture, but they were reviewed not only within the Department, but also by scientists from the Department of Health and Human Services, National Institutes of Health, the Food and Drug Administration and the Office of Disease Prevention and Health Promotion.

We do work together, and I think that we will work well together and we expect to continue to do so.

Mr. Chairman, thank you again for giving me the opportunity to speak with you today, and my colleagues and I would be happy to respond to your questions.

[The prepared statement of Ms. Chadwick appears at the conclusion of the hearing.]

Mr. **Hatcher**. Thank you, Ms. Chadwick.

Mr. Brown, do you have questions of either of the witnesses?

Mr. **Brown**. I think I might have, yes.

Mr. **Hatcher**. I thought you might.

Mr. **Brown**. It seems to me and this is not a question; just a statement, that both in the Department of Health and Human Services, and the Department of Agriculture, you are attempting, and in some cases achieving, improvements in the makeup and conduct of the national nutritional monitoring system.

And I am not unhappy with that. I am not taking a position that we have a system that is in crisis, or that we are not doing some very good work in connection with what is going on. What disturbs me is that for the past 10 years, the committees represented here, have been making recommendations, embodied in legislation for the last several years, to resolve or to assist in making further improvements in the system. And we did not invent the kind of proposals that were made, and we did not invent the criticisms that we have made. We have a large, complex system which needs better coordination and better accountability.

And that is not unique in the Government. There are many situations of that sort which exist. I have, I think, a copy of the report that you referred to, Dr. McGinnis, from the Federation of American Societies for Experimental Biology, and that report refers to the previous reports that they have made, Nutrition Monitoring in the United States for example, in 1986. And it says, progress has been made in implementing some of the recommendations from these previous reports, but most of the suggested changes were not reflected in the data available to the Expert Committee on Nutrition Monitoring, which did the report.

Now, this is the report that you and the Department of Agriculture commissioned, not that we commissioned, and I am quoting from it. It says, USDA and DHHS have developed plans for survey activities, to a large extent, through 1995, and thus recommendations offered now may not be implemented for some time.

And it goes on to discuss a number of the different kinds of recommendations for improvements, which they have made in the past and which they are making here. It says, for example, the panel favors introducing greater similarities in data collection methods, as long as methods differ, questions will continue to arise about the comparability of data—a point that we have been making, as I say, for the last 10 years.

There are a number of other recommendations and statements made here, which I think are all pertinent including, one in particular which I want to raise. It says, because the Expert Panel on Nutrition Monitoring, which prepared this report, was not informed about the details of content and methodology in the current and planned surveys—which you have both referred to—it is difficult to be specific in recommending many changes to improve comparability.

The question that I would ask immediately, is why was the methodology not made available to the expert panel, especially since one of the goals of your operational plan is to increase comparability of surveys conducted between the two agencies? And particularly, it seems to me, why would you not make that information available to the group that you commissioned to do this report and make recommendations to you?

Dr. McGINNIS. Let me take a first attempt.

Mr. BROWN. You may comment in general about the content of the report, because as you know, it continues to assert and make the same recommendation that it has been making for a number of years, or similar reports, and I know that the experts that participated in this are people that you respect or you would not have hired them to do this.

Now, why cannot you make data available to them and why cannot you follow their recommendations?

Dr. McGINNIS. Let me comment on three counts, if I may. First, I think it is important to emphasize the accomplishments that have been made with respect to survey complementarity because that relates directly to the point raised by the review group. And there are several examples, but I will just mention three. First, the fact that NHANES III will use and is using the USDA food composition data base for estimating dietary intakes in order to draw them into complementarity there.

Second, the statistical reports from NHANES III and USDA surveys are being formatted so that readers can make direct comparisons, that is, common age groups, demographic characteristics and so forth.

And third, data tape documentation has been improved so that researchers can use data from surveys from both departments more easily. There are other examples, but the key point here is that some of the recommendations that were made in the first report are being implemented and I hope some of the most important recommendations are.

The advisory group's reflection that data were not available was more reflective not of the fact that changes have not been made, but that the fact that those changes have not yet produced the data that are now being collected for their review. That is to say that there is a little lag time in the time that you implement changes and the resultant data are available.

Along those lines, that is to say, related to the issue of what the committee was asked to review, the scope of work for the group specifically asked that they review the data that were currently available, not that they review the methodology. I have to say I share some of your own interests and share them rather keenly, as the staff will tell you, in the hopes that methodology will be reviewed more extensively by these groups. But, it was not within their charge. I think that it was therefore, their choice not to review the methodology.

Let me ask Dr. Cathie Woteki, who has served as the Executive Secretariat for this effort, to elaborate, if she can.

Dr. **Woteki**. Thank you, Dr. McGinnis.

He is essentially correct in telling you that this scope of work was very narrowly defined for the contract that resulted in the preparation of this report. That scope of work was developed by a joint project steering committee whose membership reflected those agencies, within the Department of Health and Human Services, and the Department of Agriculture that were providing data for the report, and also have broad responsibilities for nutrition monitoring.

The overall objective of the report was, first of all, to review the information that was available from the various surveys and surveillance activities that had been conducted and had become available, since the first report was published in 1986. That was a voluminous amount of information, as you will see when you look at the full report.

There was some discussion, with the expert panel and with the contractor, of the possibility of the committee examining the procedures and the protocols that had been put into place for the new surveys that have just begun. We ran into a problem, though, with time in completing the report and the scope of work, and then adding on a new activity of reviewing methodology.

And in view of the fact that our contract was very narrowly constructed, we felt that it was not appropriate, and we certainly did not have the time or the additional funds, to go into a review of protocols of the current surveys.

Mr. **Brown**. Mr. Chairman, I recognize that I am abusing my time and I will either stop at this point or ask unanimous consent for additional time, whichever you prefer.

Mr. **Hatcher**. Without objection, you are allowed to proceed.

Mr. **Brown**. All right, let me just follow up very briefly and I will not belabor this.

Your answer to my question as to why they made the statement is that they were not mandated to look at comparability issues and therefore, you did not provide them with the data to do that. But one of the goals of your operational plan is to increase comparability of surveys conducted by your two departments and it is a little unclear to me why you would not ask the panel to make recommendations in that area. And apparently it was unclear to the panel, because they make the statement that it is difficult to be specific in recommending many changes to improve comparability. They did not say that they were not asked to, they said it was difficult to make them because you did not give them the data.

And I suggest that there is some disconnect here somewhere. If you really wanted to evade the line of questions I am making, you should have them rewrite their report in a somewhat different way.

The specific question I will ask is that in view of the importance, the primacy of this issue of comparability of data, and that is in the goals of your operational plan, why did you not ask them to do it, if, in fact, you did not; and have you asked anybody else to do it, since it is such an important part of the problems that face the variety of surveys?

Dr. McGinnis. The reason that the group was not asked to specifically address the issue of survey methodology was that the intent of the exercise as we were interpreting the interests of Congress, as well as the interests of the field, was essentially to look at the nutritional status of the American public and reflect on that nutritional status in its myriad forms, in a formal fashion and in the report that they developed.

Mr. Walgren. Would the gentleman yield?

Mr. Brown. I would be happy to yield.

Mr. Walgren. Just on that point, and I hesitate to interrupt, but you said that they were not charged to address methodology just in your last response to Congressman Brown.

In the executive summary of the report, on page 15, it says, the EPONM (Expert Panel on Nutrition Monitoring), which is the agency that was conducting this report, was also charged to address methodological issues, in comparing data from different sources or times, and to identify the types of analyses necessary to make comparisons meaningful.

Now, it seems very hard, to me, to square that specific charge given them, with the idea that they were not charged to address methodology.

Mr. Brown. Would you yield back?

Mr. Walgren. I would be happy to yield back.

Mr. Brown. The report we are referring to is Nutrition Monitoring in the United States. It is labeled an update report. The previous report is Nutrition Monitoring in the United States. Its recommendation No. 7 is to improve comparability of data. Mechanisms should be developed through which information from different data systems can be integrated and the results reported in a comparable manner.

I find if difficult to believe that in asking this group to make an update, that you excluded dealing with a subject that was dealt with in the previous report.

Dr. McGinnis. It is my understanding, Mr. Brown, that the panel was asked, and indeed, reviewed the methodology for the existing surveys, for which the data were provided. Without getting into detail, let me just say that this is an issue that I personally am keenly interested in and then in the next go around, if it was not done adequately this go around, I would like to see the major emphasis on methodology.

And if Congress feels the same way, then I would hope that you would direct us in choosing between a relative emphasis on just the reading of the data, and a relative emphasis on the methodologic procedures involved. Let us know that and, we will, I can guarantee you, be responsive.

It is an issue that is very important.

Mr. Brown. I yield back the balance of my time, for the present, Mr. Chairman.

Mr. HATCHER. Mr. Emerson.

Mr. EMERSON. Thank you, Mr. Chairman.

The Federal Government has been working on the national nutrition monitoring system since 1977. It is now 1989. Would you describe, any one or all of you, how you feel we stand at this point? Where are we, and where do we want to go, in brief lay terminology?

Ms. CHADWICK. Mr. Emerson, if I may?

Mr. EMERSON. Certainly.

Ms. CHADWICK. As we have indicated already, we do feel that we have made progress but we view this as really just steps in what should be and what we are committed to making a continually improving process.

To tell you what some of the things are that we have done that we feel do indicate progress, we have referred to the Continuing Survey of Food Intakes by Individuals, which were begun in 1985. That was for the purpose of making the data more timely. Within 6 months, after the data was collected in 1985, we had the first reports out.

As we have indicated too, those Continuing Surveys of Food Intake by Individuals were begun again this year, and will continue at least through 1996.

We also have worked, the two Departments together, to use the same food composition data base for the NHANES III and the Nationwide Food Consumption Surveys, as well as the food coding manual. We have, at USDA, expanded the National Nutrient Data Bank. In 1977, for example, we could provide nutrient data for food energy and 14 nutrients, and now we can provide data for food energy and 28 nutrients.

Many of these are believed to be, by many people, of public health significance, things such as cholesterol, sodium, fiber and many others. We also have improved the methodologies for nutrient analysis. Other ways that we have improved survey complementarity have been that we now report our data for the same age groups. We have similar reporting formats, both in the printed matter and also in the data tapes that we make available.

In the area of dietary guidance, we think that the Dietary Guidelines for Americans have been the centerpiece for us to enable the Federal Government to speak with one voice in giving clear, nonconflicting messages to the public. The Dietary Guidance Working Group, at the Department of Agriculture, that we have already mentioned, reviews everything that comes from the Department of Agriculture. And we have a representative, there are nine agencies within USDA, represented on that group. And we have a representative from DHHS. They also have a Subcommittee on Dietary Guidance and we have a member on their committee.

Dr. McGinnis had mentioned earlier the Interagency Committee on Nutrition Monitoring. This is a parallel committee to the Interagency Committee on Human Nutrition Research. And these were established to coordinate not only the two surveys that we hear the most about, but also the 30-some-odd components of the national nutrition monitoring system.

So these are examples of some of the things that we think that we have done that have definitely been improvements. Now, we are not saying that we think that improvements are not needed. We do feel improvements are needed and if I may, I would be glad to enumerate some of those as well.

We would like to do more with the Nationwide Food Consumption Surveys and the NHANES to make them even more comparable. We would like to work, as well, across the whole nutrition monitoring system, the other components of it—the surveys that are done by the Centers for Disease Control, the Food and Drug Administration, for example.

We also would like to see improved coverage of high-risk groups, such as the elderly, Native Americans on reservations, the institutionalized—in nursing homes for example, the homeless, although that is going to be a very hard question to get at, teenagers, pregnant and lactating women. These groups are covered in all of the surveys that are done, but we would like to focus more on that. It is a matter of having the funding to do it.

We think and we agree that methodology needs to be continually improved, on such things as children's intake, for example, and on alcohol intake. We know that this is an area that is very difficult to measure and we would like to improve our ability to measure that. The response rate in surveys—as more women are working and there are more surveys, people—we do not get as high a response rate as we would like to; we would like to improve that.

We would like to help users access and use our data to a better degree to meet their needs. We would like to improve the timeliness of the reporting and we are working on that and are committed to it.

Dr. McGINNIS. Mr. Chairman, may I just make one comment?

Mr. EMERSON. Mr. Chairman, I would ask for unanimous consent for enough time for Dr. McGinnis to reply, after which I will have another unanimous consent request.

Mr. HATCHER. Without objection.

Dr. McGINNIS. I think that it is very important that we do not sell ourselves short. I think that we would be very hard pressed to name any country, including those that are a fraction of our size, and our complexity, with a better nutrition monitoring system. For that matter, with respect to better gains in some aspects of nutrition.

Where we have shortfalls, in particular, are related to some of the issues that Ms. Chadwick mentioned, with respect to special populations—the low-income, minority population, the homeless population and so forth. But also with respect to some of the residual problems with complementarity between the surveys. We have made progress and I think that we will continue to make progress but these are surveys that are collected for different reasons and there is going to be some asynchronies if you will.

Our major challenge is to reduce those asynchronies. But I think that the bottom line is that we are doing very well in the community of nations in our effort to monitor nutritional status and we are providing an example, across that community of nations, on how best to do it. We want to do better, but we are doing OK now.

Mr. EMERSON. Mr. Chairman, I have a number of other questions that I would like to ask Dr. McGinnis and Ms. Chadwick and I ask unanimous consent to submit questions to them in writing and that they may respond and their answers can be placed in the record together with the questions.

Mr. HATCHER. Without objection.

Mr. EMERSON. Thank you.

Mr. HATCHER. Mr. Walgren.

Mr. WALGREN. Thank you, Mr. Chairman.

I do not mean to take away from the progress that might be viewed as having been made in this area, and I do not denigrate the good will that various players in the executive branch bring to it. And, yet, I cannot be but struck by the fact that we are spending millions of dollars, $50 million specifically on nutrition monitoring, millions of dollars of taxpayer's money. We are spending many more millions in nutritional research which will be useful, or not able to be used, if this base of nutritional impact is not developed properly.

And we have to push ourselves awfully hard to justify that expenditure. When I look at the record here, on the one hand we had the departments before the Congress a year ago, in September 1988, and it was said at that point, that a draft of the National Nutritional Monitoring Directory, which as I understand it is simply a list of nutrition monitoring activities, a draft of that directory was prepared 1 year ago.

And, according to your testimony, it is now just completed. And it is very difficult to understand why it takes 1 year, in a system like this, to move a list from draft to issuance.

It seems to me that we are really slow as mud. And then when reports are commissioned and they come back saying that they were not given access to current data, I think that is beyond understanding. And it is their assessment that these plans have now been developed, by both USDA and the Department of Health and Human Services, that essentially will lock-in the survey activities through 1995.

And we spend good taxpayer's money to go out and identify—and this is, quote, "they are charged to identify the types of analysis necessary to make comparisons meaningful", and you do not give them access to current data.

Now, how would you like to take that to the taxpayers and say that you want their dollar to spend it?

Dr. McGINNIS. I would like to take issue with it, as a matter of fact. I think it is just inappropriate, and it is an inaccurate reflection on the part of the group to say that they were not given access, or to extract that one element of their report, because they were given access to anything they wanted. I will be happy to provide for you my own written comments on the drafts, which had in the margins, scribbled, where are the methodological recommendations here?

We would be happy to provide the committee access to anything that they wanted, in their review process. They, apparently, looking closely at the draft of the scope of work which was reflective of what we felt was the major interest of Congress and the nutrition community, elected to focus outside of the area of methodology.

I can assure you that we welcome any recommendations on that methodology. I can only repeat, for the third time now, it is my personal highest interest and it is not fair to say that we consciously denied access on the part of our review group to methodologic information.

Mr. **Walgren**. I guess that is a simple conflict in the record that we will have to resolve, because, as I quote their report they say they were, quote, "not informed about the details of content and methodology in the current and planned surveys," period.

Dr. **McGinnis**. We will have to resolve that.

Mr. **Walgren**. But I think this ultimately is the real problem. All that Congress was asking was to get some mechanisms in place, where these kinds of questions would be resolved and we would not come back up to congressional hearings, with one person saying that they thought they were going to get something, and the other person saying they either never asked for it, or somehow it did not happen.

All we are trying to do is to put you people together in one room so that we do not have these kinds of conflicts and the taxpayers can have some confidence on how their money is being spent.

Dr. **McGinnis**. Fair enough.

Mr. **Walgren**. As I understand it, the report of the Expert Panel on Nutrition Monitoring indicates that the response in these surveys, in some instances, was less than 50 percent. And there are many in the scientific community who cannot use a response that is less than 50 percent.

What is the response rate of the 1988 USDA Nationwide Food Consumption Survey?

Ms. **Chadwick**. Mr. Walgren, I would like to ask my colleague, Dr. Heimbach to respond to that question, please?

Dr. **Heimbach**. The response rates for the 1987-88 Nationwide Food Consumption Survey varies somewhat across groups. Let me state, before I even start giving you any numbers, that they are very unsatisfactory, and we are not pleased with them. There are some very specific reasons for the problems, most of which have been improved and I am going to ask for an opportunity to mention a good side on response rates also.

Those rates seem to be in the 50- to 60-percent range, depending on what group you are looking at for the 1987-88 survey data. Now, we have addressed the problems that led to that. In the 1989 continuing survey, which began in the spring of this year, to this point, we are running completion rates on the order of 75 to 78 percent, with the improvements that we put in place, after the difficulties that we encountered with the 1987-88.

Similarly, in the 1985-86 continuing survey, we had response of above 75 percent for virtually all groups and over 80 percent for many groups.

Mr. **Walgren**. Is there a difference between the nationwide study and the continuing study?

Dr. **Heimbach**. The primary difference and to our minds, the No. 1 cause of the difficulties, is that the Nationwide Food Consumption Survey is a larger survey not only in terms of the amount of information that it gathers, but more critically in terms of the amount of time on the part of the respondent that it requires. The survey simply is a fairly large respondent burden.

Mr. WALGREN. Let me just close, Mr. Chairman, because my time has expired, by asking whether we are analyzing this 1988 data that is in the less than 50 percent response category?

Are we making an effort to analyze that?

Dr. HEIMBACH. Yes, there are, indeed, ways of dealing with low response rates. It makes things more complicated and it is very unsatisfactory for a lot of reasons. Some of the questions that have to be asked, is to what extent the lower response rate actually introduces a bias into the survey? One of the things you can do, for example, is to look at how your distribution compares with census data as far as age, income, education, sex, and so forth, patterns like that.

Mr. WALGREN. Thank you, Mr. Chairman.

Mr. HATCHER. Mr. Boehlert.

Mr. BOEHLERT. Ms. Chadwick, in your testimony you have repeatedly criticized H.R. 677, but parenthetically, you claim that the Department is largely carrying out its mandates. What I would like you to describe, more fully for the committee, is why do you think that the bill would impose a burden on people?

Ms. CHADWICK. Our major concern is that we feel that it would divert the staff and resources that we are presently using to collect data, to analyze it and to report it, would be diverted to support the requirements of the management structure and the reporting requirements of the bill.

Mr. BOEHLERT. I have a feeling that the people-hours spent over the years, the principals, staff, and paperwork, et cetera, et cetera, probably represents a much greater expenditure, but you know, fighting this thing, than if you had done the deed at the beginning.

I mean, if you go back and analyze, what we have been through over these past several years, and you really assign the time and the paper and everything else to the campaign to fight this and cost it out, I think that you will probably find that you are spending more money fighting it, than the whole thing would have cost you in the first place.

How about the advisory committee; what is the great objection to the advisory committee? What is wrong with having some experts advise at a very modest cost to the U.S. Government?

Ms. CHADWICK. Again, there is no staff support provided to help with the advisory committee. We are not opposed to advice, and to input from other groups. In fact, we do seek that advice, and do get it. We have now, at the Department, the Human Nutrition Board of Scientific Counselors and they are an advisory committee, and they do give us a lot of advice.

We also have had, for several years, the National Nutrient Data Bank Conference. We sponsor that every year and some 150 users of the data come together, not only do we have an opportunity to tell them how to use the data, but we get input from them on how we could make it more useful to them. We also have plans to do this for the survey, the users of the survey data.

Mr. BOEHLERT. To get back to the previous question, if you will. And be a little more specific about the so-called administrative burden that would be imposed by this legislation?

Ms. **Chadwick**. I really cannot add a lot more to it, sir, from what I have said that we would have to provide the staff support to help the advisory committee. That has always——

Mr. **Boehlert**. That is going to be a big burden?

Ms. **Chadwick**. That is the way that we feel about it, sir.

Mr. **Boehlert**. Well, if you had the committee—sure, Mr. Brown, I would be glad to yield to you.

Mr. **Brown**. You have an advisory council—you have this expert panel that we have been doting on here, which has been providing expert advice to you. Is the burden of providing staff for that expert panel so extreme that it is handicapping you in carrying out your other functions?

Ms. **Chadwick**. Dr. Heimbach has worked with that a great deal more than I have and may I refer that question to him, please?

Mr. **Brown**. Certainly.

Dr. **Heimbach**. Handicapped, of course, is a relative term. Our own estimate is that we have dedicated approximately 3 to 4 full-time staff years to that project. In the context of total world affairs, that is probably not a significant burden. We have an agency, however, that only has about 45 professional staff members. That is a significant portion of our resources, yes.

Mr. **Boehlert**. Well, I would suggest that—do you want to pursue that?

Mr. **Brown**. No, go ahead.

Mr. **Boehlert**. I would suggest that you probably have a collective sigh of relief on the part of your existing staff if you went back and said, instead of fighting this, we are going to listen to the strong bipartisan voice of the Congress and we are going to join forces and work with them. And I would suggest you will not need one more staff hour, let alone staff year to do that.

I must say that I am disappointed; the fifth annual hearing probably will be next year, unfortunately.

Thank you, Mr. Chairman.

Mr. **Hatcher**. Ms. Schneider.

Ms. **Schneider**. I cannot help continuing in that vein, lady and gentlemen, and I think my greatest frustration is not only the time that is being lost, but the information that is not being used by the consumers. And much of the emphasis of the discussion so far today, has focused on the compilation of data. So maybe I will shift gears for a moment and ask about any plan that involves the implementation of the 10-year plan to disseminate information?

What kind of dissemination plan do you have? As we know, science and good data is only as good as it is once it is received by those who need it, rather than sitting on shelves gathering dust.

Ms. **Chadwick**. I would like to refer that question to Dr. Heimbach.

Dr. **Heimbach**. We have fairly well developed dissemination plans currently in progress for the 1987-88 Nationwide Food Consumption Survey. And we are planning a total of 22 reports going out of which 4 are targeted to the general public in the form of chart books. Several are methodological reports, specifically aimed at the statistical community and the survey research community.

Ms. **Schneider**. Let us take one step at a time. Those four reports that would go out to the public, how would they go out to the public? When you say, release them to the public, give me more specifics.

Dr. **Heimbach**. They would be distributed free of cost to some information multipliers as seems to be the "in" term to people that we hope can spread the word further, such as reporters.

The books will be accompanied by reproducibles that will make it easy for a newspaper or a magazine to produce the graphics that accompanied the report, for example, as well as presenting information in comprehensible and fairly short formats. The books will also, of course, be made available through the Government Printing Office, and presumably the Consumer Information Center.

Ms. **Schneider**. And to what degree would you be using the electronic media, from which a majority of the American people obtain their information?

Dr. **Heimbach**. We have, in the Eating Right campaign, that is in place now, and I imagine that this will be true in this campaign also, have provided press kits similar to the one that you have in front of you, to representatives of the electronic media. We are not in the position of being in the position to purchase advertising time. So part of our goal is to make it appealing enough and interesting enough to consumers, relevant enough to consumers, that they will want to carry it on the media.

Ms. **Schneider**. Do you have an advisory task force or an advisory board made up of various provider groups, such as—I do not even know the proper name, not being a member of the Agriculture Committee—but someone like the Fresh Fruit and Vegetable Association?

I mean are there industry groups that you would meet with and provide this information to, so that, for example, or in terms of grains, the Kellogs or one of the cereal manufacturers might take this information and then say, as they are doing now about high fiber diets, and quoting information from the U.S. Department of Agriculture or HHS?

Dr. **Heimbach**. We work constantly, not in terms of a formalized board, but yes, we work constantly with the commodity groups, and with State public health departments, and with State agriculture departments.

Ms. **Schneider**. There is no formal and regular meeting with those commodity groups that are providers of nutritious food?

Dr. **Heimbach**. I have a little problem with this, providers of nutritious food, as opposed to providers of nonnutritious foods?

Ms. **Schneider**. Junk-foods. I mean that is the business that you are in, is it not?

Dr. **Heimbach**. There is a committee on which we sit which is chaired by representatives of the Food and Drug Administration, called the Nutrition Education Committee, which usually meets, I believe, quarterly and includes representatives not only from the Government departments, but also from commodity and other interest groups of this sort, yes.

Ms. **Schneider**. Well, thank you, very much.

Dr. **McGinnis**. May I add just briefly to that?

Ms. **Schneider**. Yes, surely.

Dr. **McGinnis**. There are three things in particular I would like to mention with respect to dissemination. First, this report and information relevant to it, is going to be shared formally with scientific audiences in various meetings around the country and most immediately at the American Public Health Association meeting, next month and at the American Dietetic Association meeting, also next month.

And the scientific dissemination will be a focus of the user/liaison panel of the Interagency Committee for Nutrition Monitoring.

Second, and very importantly, the element in our national nutrition monitoring system that relates to food labeling, I think, is going to play a very important role as we move into a revision of our food labeling policies that are currently underway, therefore, improving the access to the American people in a very useful way, at the point of purchase.

And third, there are several public information programs at the Department of Health and Human Services, complementing those at USDA that use this information. I will mention two in particular, the National Heart, Lung and Blood Institute and the National Cholesterol Education Program which does have a formal advisory panel, including the groups that were mentioned earlier; as well as the High Blood Pressure Education Program also with a dietary flow side to their work, including a formal advisory panel; the National Cancer Institute's Cancer Prevention Awareness program which has a dietary component. And there is a public/private partnership that has emerged under the leadership of the Kaiser Family Foundation that is something called, Project LEAN, Lowfat Eating for Americans Now, that has a media based component and an advisory group that includes those groups.

Ms. SCHNEIDER. Great. Thank you, very much.

Mr. HATCHER. I would like to thank you, Dr. McGinnis, Ms. Chadwick, Dr. Heimbach, Dr. Woteki for your testimony today.

Mr. BROWN. Mr. Chairman, may I make just one short concluding statement?

Mr. HATCHER. Yes, sir.

Mr. BROWN. Reviewing again the last two reports on nutrition monitoring from the Joint Nutrition Monitoring and Evaluation Committee, there is a statement in the last one which I call to your attention. "The main considerations that should drive the introduction of changes to make the separate components—for the nutrition monitoring system—function more effectively as a system are the needs of data users, especially policymakers."

There may be, in the minds of some of you in the Department of Agriculture and HHS, that you make all of the policy down there, but there is a differing opinion up here. We may be wrong, but we need better data than we have been getting, in order to make policy.

I would strongly commend to your attention the possibility that you might help us in doing that.

Thank you, very much.

Mr. HATCHER. Thank you.

The next panel consists of four witnesses: Dr. Audrey Cross, former Nutrition Coordinator with the USDA and now associate clinical professor with the School of Public Health, Institute of Nutrition, Columbia University; Dr. Marion Nestle, former Nutrition Coordinator, Department of Health and Human Services, and now, professor and chair of the Department of Home Economics and Nutrition, New York University; Dr. Suzanne Harris, former Deputy Assistant Secretary for Food and Consumer Services at USDA; and Dr. Kenneth Fisher, director of life sciences research office, Federation of American Societies for Experimental Biology, Bethesda, Maryland.

I welcome each of you and we will proceed as we did with the prior panel in hearing from you in the order in which I introduced you and then have questions from the committee members after all of you have testified.

Dr. Cross.

STATEMENT OF AUDREY TITTLE CROSS, FORMER NUTRITION COORDINATOR, U.S. DEPARTMENT OF AGRICULTURE, AND ASSOCIATE CLINICAL PROFESSOR, INSTITUTE OF HUMAN NUTRITION AND CENTER FOR POPULATION AND FAMILY HEALTH, SCHOOL OF PUBLIC HEALTH, COLUMBIA UNIVERSITY

Dr. CROSS. Thank you.

If it is all right with you, I would like to submit my formal written testimony for the record and summarize some of the comments from it this morning.

Mr. HATCHER. Very well.

Dr. CROSS. First, you introduced me so that I do not think that I need to do that, except to add that in addition to my role as professor of nutrition, I am also a nutrition news correspondent for CNBC-TV, and today I am going to speak to you from the three perspectives: as a former Government employee, as a professor consulting with State and local governments, and also as someone concerned with media issues.

In 1978, I became coordinator for human nutrition policy reporting to Bob Bergland and among one of the first assignments I had was to respond to congressional questions about USDA-DHEW's data collection system.

I agreed that it was really possible and feasible to integrate those programs. What we produced during our term of office was a pile of reports, somewhat near the kinds of costs that were suggested by one of your members, but did not really come up with a coordinated and complete system. So it is not necessary for me to tell you who have been looking at this issue for the past 10 years, that bureaucracies move at snail like paces; and many of the jurisdictional roadblocks that were prevalent in 1978, exist today and are the very things that are stopping us from having a coordinated and integrated system of monitoring.

I would like to share with you, however, some of the things that are impacting State and local governments as they look at their needs for data, particularly, as the emphasis on meeting health needs has moved from the Federal level, back to the State and local level. They found some discrepancies and also some difficulties in getting the information that they need.

Two years ago, California passed legislation to study the feasibility of a statewide monitoring system for themselves, because they did not have access to the necessary data for making decisions in their State. I helped them with that study and we found 20 State and Federal programs operating in California serving 6.2 million at a price of $1.7 billion.

All of the programs that we looked at collected some sort of nutrition information, but there was little standardization in that information. Many of the programs did not aggregate their information, and many of them never put it in a report, so that it could be used for policy and decisionmaking purposes. There was a lot of inability to compare programs across the State, to see which were the most effective and efficient.

Similarly, those kinds of problems exist in the most populous city in the United States, in New York City. As a consultant working with the State health department and also the city government, we have tried to identify the nutrition status of children through using school-based data systems.

One of the things that we have run across is that schools do not collect information about child nutrition. Further, although the State of New York has some monitoring systems, they do not aggregate or segregate information about children. And when we looked at Federal data, we found that children were highly unrepresented in that group. As a matter of fact, the last USDA data includes only 485 children in their sample.

Even if they did adequately sample the population of children, we would have difficulty in applying that data to the city of New York. The ethnic mixes in population, the social economic conditions can change so drastically within 1 year in that city, that no set of data would really be timely, relevant or sufficient for us to answer some of the program and policy questions that we have in the city of New York.

This is not to say that the NHANES data or the USDA data are worthless. Quite the contrary, they are invaluable. Both State and local governments cannot solve any of the diet or health problems alone, just as they cannot solve water pollution, air pollution, smoking problems alone.

Federal coordination is needed to standardize this data collection. This would allow for comparison between programs and surveys, and comparisons between and within states. States need technical assistance. They cannot afford either to research or to refine data collection methods or equipment, nor can they afford statisticians or epidemiologists who have been trained in nutrition.

Unless and until there is a uniform system of Federal reporting that is mandated by law, there will not be either a foundation or an infrastructure that we can relate to and we will continue to have this Tower of Babel situation that we do in the States and local government currently. The quantity and the quality and the speed with which States and local governments receive information will continue to run at the whim of changes in the administration, precarious OMB oversights, unstable budgetary conditions, and jurisdictional disputes.

I do not care what the personal commitment of a member of the administration is to this. Until there is some sort of mandate from you all, that puts in place a system, it is not important what one person's personal commitment is to a monitoring system. We need legislation that makes this an ongoing system that serves state and local needs.

Just to give you an idea of how this might impact public information needs, on February 27, the National Resources Defense Council (NRDC) issued a report called, "Intolerable Risks: Pesticides in Our Children's Food." The report estimated that some 6,000 preschoolers would eventually get cancer from being exposed to pesticides, particularly alar in apples. As the nutrition correspondent for a national consumer news network, CNBC–TV, I had to cover this story. I really hoped that NRDC had miscalculated. The Environmental Protection Agency (EPA) claimed that they had. They criticized the report for relying on 1985 data from USDA, saying that while that was the most current data, it was less reliable than the 1977 data, because the sample size was smaller. That difference in the data base made a 100-fold difference in the estimation of risk for preschool children—it made a $100 million difference to the apple industry in this country. By May, they were reporting losses in excess of that amount just in sales of raw apples alone.

Did NRDC use the wrong data base? In their sincere attempt to inform the public they chose the most recent, the most up-to-date statistics which Government had to offer them. If they erred, their error serves only to show us the importance of an ongoing national nutrition monitoring system.

Finally, the need for a coordinated Federal nutrition system is emphasized by fat substitute proposals which are currently pending before the Food and Drug Administration (FDA). Using Federal data, Proctor and Gamble, the manufacturer of Olestra, argues that fat substitute can reach as high as 5 to 9 grams of fat per day. Their estimates are based on several assumptions, among them, that consumption patterns will not change in response to fat substitute introduction.

Now, I do not know about you, but I would imagine that just about everyone will be rushing out to the store to see if they can have their cake and eat it too, when fat substitutes are introduced. And I expect that that is going to significantly change or increase consumption beyond what Proctor and Gamble, and FDA are currently expecting. Their estimates, also, are not age-group specific. Arguably, teenagers who consume more snack foods than other groups would be exposed to larger quantities of artificial fat.

In addition to the difficulties of predicting risk, FDA faces the problem of monitoring fat substitutes once they are in our food supply. And some of their current data collection systems do not classify novel and new foods differently from similar foods which they will be replacing. For example, potato chips made with vegetable oil or made with Olestra are still classified as potato chips. Neither is FDA responsible for the health of the agricultural sector, yet the decisions that they will make in this particular case is going to impact the safflower, the soybean, the cotton seed, and corn growers as well as dairy farmers in the United States. FDA will make their decisions about the fate of fat based on USDA and HHS data.

In conclusion, current monitoring and surveillance systems offer invaluable resources of information for local, State and Federal policymakers. Yet, the very separate nature of these systems leads to gaps in information, delays in data aggregation analysis and release, and narrows its utility. It has been 10 years since I have spoken to Congress about this issue. And you are to be commended. You have been persistent in your efforts to weld a workable relationship between the major Federal surveys in order to meet the needs of your constituents. Progress has been made as the government officials, who spoke here this morning, have said. But that progress has been, and it will continue to be both piecemeal and prolonged until you mandate a system of coordination that will bring together the elements of these surveys in ways that are meaningful for State, local and Federal policymakers.

I urge you to send this legislation forth from the Congress.

Thank you.

[The prepared statement of Dr. Cross appears at the conclusion of the hearing.]

Mr. Hatcher. Dr. Nestle.

STATEMENT OF MARION NESTLE, FORMER NUTRITION COORDINATOR, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, AND PROFESSOR AND CHAIR, DEPARTMENT OF HOME ECONOMICS AND NUTRITION, NEW YORK UNIVERSITY

Dr. Nestle. Thank you. Good morning and my name is Marion Nestle and until October 1988, or starting in October 1988, I have been professor and chair of the department of home economics and nutrition at New York University. Prior to taking this position, for 2 years, I was Staff Director for Nutrition Policy in the Office of Disease Prevention and Health Promotion under Dr. Michael McGinnis. My principal responsibilities in that position were as Managing Editor of the Surgeon General's report on nutrition and health and I was Staff Coordinator to the Nutrition Policy Board.

I would like to submit a formal testimony to the committees, if I may, and summarize my remarks briefly. I very much appreciate the opportunity to speak before the subcommittees in favor of nutrition monitoring legislation and, particularly in favor of the provision for an external advisory committee. I believe that such legislation is both desirable and necessary and I would like to give four examples of areas in which I have needed data from the nutrition monitoring system in my job with the Government and in my present position that are not currently available.

My first example deals with the Surgeon General's report. This report, as Dr. McGinnis mentioned, had as its primary conclusion the need for reduction of dietary fat by the American population. Much of the report provided extensive evidence for this conclusion.

One piece, however, that was missing was data on dietary trends that might be used as a basis for decisions about levels of changes that need to be made in dietary intake of fat, and also, as a basis for evaluating intervention programs to help the American public reduce dietary fat intake. The fact that no trends data were presented in the report was no accident. I personally dealt with eight drafts of a chapter on dietary patterns and practices that reviewed data from the Departments of Agriculture and Health and Human Services that might lead one to make conclusions about dietary trends; yet, when these chapters were submitted to staff of the nutrition policy board, in each case, the staff was unable to reach consensus on the meaning of these data for dietary trends because these data are not comparable.

The staff felt that existing data do not permit scientifically sound conclusions about trends in dietary intake, from the existing survey data. As a result, the chapter on dietary practices and patterns was deleted from the final report, and instead, the report contained a recommendation for a surveillance system that could monitor dietary trends over time.

My second example is the "1990 Health Objectives for the Nation," the Public Health Service's principal mechanism for developing and implementing a public health agenda for the United States. The first set of objectives was developed in 1980 and designed to be achieved by 1990. Seventeen of the original objectives were devoted to improved nutrition.

In 1985, the Public Health Service established a progress review of the Nation's progress toward achievement of the objectives, and discovered fairly quickly that 6 of the 17 nutrition objectives could not be evaluated because data to track them were not available. What this means is that the overall progress of the Nation toward achieving the 1980 nutrition objectives will not be able to be evaluated, and much of the value of the whole procedure of this extremely important effort has been lost.

The principal benefit to the nutrition community of the 1990 nutrition objectives has been as an object lesson in how to improve the design of objectives for the year 2000. What will happen now is that the nutrition objectives for the year 2000 will have to be based on the availability of data in order to track them, which I feel limits the flexibility in designing these objectives to a considerable extent.

My third example has to do with hunger surveys and the issue of inadequate access to food. This is of national concern. More than 100 communities throughout the United States have developed surveys that examine issues of hunger and food insufficiency in their communities. But most of the agencies that carried out these surveys did not conduct them according to scientifically reliable principles, and, as a result, their results have been quite controversial and they are not generally accepted. It seems perfectly evident that if we are going to target food assistance programs to those groups most in need, it is going to be necessary to have data on who is most in need, and where these groups are located.

And, yet, introduction of basic food sufficiency questions into the NHANES-III survey became a matter of prolonged discussion between USDA and DHHS. I witnessed some of these discussions and can witness the amount of staff time that was devoted to them. If published hearsay on this matter is correct, the only way in which the agencies ever got together to put these questions into NHANES-III was as a result of intervention from the Office of Management and Budget. If this is true, this too is an example of the need for independent, outside intervention into this whole system to make it work better.

My last example has to do with the need for data on special populations. The Surgeon General's report and other Federal reports have remarked on the disproportionate burden of chronic disease that is borne by low-income groups and minorities in the United

States. I am currently working with a New York State-funded coronary heart disease prevention program that is targeted to black Americans and to Hispanic Americans in three areas of Harlem and Bedford-Stuyvesant—four areas that are among the poorest communities in the United States.

In designing dietary intervention programs for these communities, it is necessary to know what the groups are actually eating and what their nutritional status is, and yet we have no information on this in order to begin working in this program. Such information is not now available from existing DHHS and USDA surveys.

The major national surveys did not really have sufficiently large sample sizes to provide this level of detailed information, so vital to improving the health of these communities. Hispanic HANES will address some of these issues because it will give us data in a few years on Puerto Rican, Mexican and Cuban Americans' nutritional status, but it does not deal with Dominicans, which is the largest Hispanic population in north Harlem.

These examples and my years in Washington, have made me realize that the progress in integrating the surveys and coordinating the surveys is, indeed, taking place, but in my opinion and what I observe, it is occurring reluctantly, grudgingly and at the speed of glaciers.

I believe that this information is vitally important to policymakers, to people who are developing programs and to people who are making decisions about resource allocations. Better coordination between the agencies would help a great deal, but it really cannot be left to the agencies to continue in this way. What is really needed is a fresh look at the whole system, and an independent look at the whole system, in order to evaluate overall needs for information and the best way to obtain this information.

I believe that legislation that establishes an independent advisory committee is a very good way to begin this process and I thank you for allowing me to provide these remarks.

[The prepared statement of Dr. Nestle appears at the conclusion of the hearing.]

Mr. HATCHER. Dr. Harris.

Dr. HARRIS. Thank you, Mr. Chairman.

STATEMENT OF SUZANNE S. HARRIS, FORMER DEPUTY ASSISTANT SECRETARY, FOOD AND CONSUMER SERVICES, U.S. DEPARTMENT OF AGRICULTURE

Dr. HARRIS. I am Suzanne Harris and I had the honor and privilege of serving as the Deputy Assistant Secretary of Agriculture for Food and Consumer Services, from October 1985 to January 1989. I want to thank you for the opportunity to discuss my perspective on the nutrition monitoring system based on my experiences as a policy official with the USDA at this reunion, as it is being called.

At the outset, I want you to know that the views I am expressing are my own and do not reflect those of my current employer, nor necessarily those of the Department of Agriculture.

While at USDA, much of my time was devoted to understanding the issues surrounding nutrition monitoring legislation and finding ways to improve the Federal system for nutrition monitoring with special attention to the USDA component of the system.

I am proud of what all of us at USDA and DHHS, working together, have been able to achieve, but I realize that not everyone is convinced of our commitment. Many of the concerns raised by the supporters of the nutrition monitoring legislation, as you have just heard, were legitimate in the early 1980's. Voicing these concerns has motivated change in the system, but during my tenure at USDA, I was frustrated by the unwillingness of the legislation supporters to acknowledge these improvements. Slowly, acknowledgement is being voiced, as it has been this morning. But it is usually followed by the charge that these improvements are not enough. I agree and so do the members of the Interagency Committee for Nutrition Monitoring (ICNM).

That is why they are continuing to work toward a goal of a more highly integrative and responsive nutrition monitoring system. We are all looking at the same information, but some of us see a glass half empty, and a few of us see a glass half full. I am in the latter category and I urge you to consider how you are viewing the system before you pass any legislation. Legislative overkill, as the result of a pessimistic viewpoint, may create more problems than it solves.

What are the components of an ideal national nutritional monitoring system? I would offer the following as the truly essential components: Strong coordination between monitoring activities to achieve complementarity and adequate coverage; evaluation and interpretation of results for policymakers; exchange of information between users to address needs and to provide expertise; and research to improve data collection, analysis and dissemination.

As Congressman Brown has so succinctly stated it, infrastructure and science base. Then why has not the USDA jumped up and down for the passage of monitoring legislation?

It is because these bills have gone beyond these essential components to proscribe a complicated and cumbersome set of requirements. These unnecessary requirements will divert scarce resources, dollars and staff time, away from the actual monitoring activities.

In past testimony, the progress charted by the Department has been described by bill sponsors as just meetings, reports, and revised plans. But I respectfully request what more is H.R. 677? Without substantial additional funding, the result of H.R. 677 will be meetings of the board and the advisory council, the reports from the advisory council, the board and an outside scientific panel and a revised plan.

The question of wasteful duplication in data collection is often cited as evidence that the watchful eye of an advisory committee and better coordination are needed. But looking at the broad array of activities that make up our nutrition monitoring system, I do not know of any duplication of this magnitude. My mental picture of the monitoring system is as a mosaic—many pieces fitted together with some overlap to permit linkage.

No one survey can provide all of the information that is necessary. Survey overlap in some data provides the necessary linkage that allows comparisons between surveys. And in the system I picture, each member agency would do what they do best and would coordinate that function with other members.

This is the goal of the ICNM and achieving it will take time. Neither H.R. 677 nor H.R. 1608, in my opinion, will speed up the accomplishment of that goal.

These large surveys take a long lead time. Both USDA and DHHS are committed to major survey activity already under way, through at least 1994. If the planned revisions called for in both pieces of legislation are to be more than a paper exercise, ongoing data collection could be disrupted, just as we are reaching an important goal. Though 1990 is still a few months away, continuous data collection using a moving average approach is in place, through USDA's Continuing Survey of Food Intakes by Individuals and the Department of Health and Human Services' NHANES.

These data will be available in the next few years. The results of the enactment of these bills will be that overworked staff will be shifted from working on the timely release of this very data that you are asking for to writing another plan.

The issue of money has been a part of this debate. The current proposals contain no authorization of funds. Yet, to expand data collection, to cover the high-risk groups, such as Dr. Nestle has just referred to, will require more money. While I was at USDA, I did ask for additional money and additional staff to increase survey coverage. I was not always successful.

But, before you jump on the Reagan administration for not being serious about nutrition monitoring, let us look at what happened to the budget requests that were made. Since 1982, when HNIS was established as a line-item in the budget, Congress has only twice funded the agency up to the amount requested in the President's budget and that includes the fiscal year 1989 figures.

As a young scientist, I was taught that simplicity is a virtue, always to be strived for in developing experiments. So if you are interested in my advice, it is to simplify the legislation. Remove from your bills nonessential items, remembering that essentiality is sometimes like beauty, in the eye of the beholder. A simple message is one that can be more readily understood and implemented.

Then if you do not like the progress, you certainly have the power, through oversight hearings, and appropriation authority, to continue to get the Department's attention.

Thank you very much.

[The prepared statement of Dr. Harris appears at the conclusion of the hearing.]

Mr. HATCHER. Thank you.

Dr. Fisher.

STATEMENT OF KENNETH D. FISHER, DIRECTOR, LIFE SCIENCES RESEARCH OFFICE, FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY, ACCOMPANIED BY SUSAN M. PILCH, SENIOR STAFF SCIENTIST

Dr. FISHER. Thank you. My name is Kenneth Fisher and I am the director of life sciences research office of the Federation of American Societies for Experimental Biology and I am accompanied today by Dr. Susan M. Pilch who was the staff leader on the production of the report, which Representative Brown has referred to.

Let me express our sincere appreciation to the members of the committees for this opportunity to present a brief overview of how that report was prepared. We understand that you are primarily interested in the processes by which we achieved the preparation of the report, fostered cooperation among the Departments, developed a consensus on the interpretation of the data in the report, incorporated the views of the members of the expert panel and as well, the recommendations of the report and some comments on future needs and objectives of national nutrition monitoring.

As indicated, this report was done under contract. The report scope of work called for us to include an update of dietary and nutritional status, as presented in the first report and an in-depth analysis of two examples of the national nutritional monitoring system health and dietary data. The first on the relationship of diet to a chronic disease, specifically nutritional factors in cardiovascular disease, and second, data on a dietary issue—assessment of iron nutriture.

I have provided a written statement and there are more details of what I am saying in there and I am just paraphrasing that for the sake of abbreviated presentation.

To facilitate the objectives of the contract with the two agencies, the contract included: Provisions for the support of the contractor's scientific staff to collect, collate, analyze, and review data from components from the national nutrition monitoring system; provisions for the contract or to organize and independently manage a panel of non-Federal experts to review and evaluate data; the knowledge and experience of the consulting scientists to encompass the topical areas represented in the national nutritional monitoring system; resources for the contractor's scientific staff to draft the report and for the expert panel to meet, discuss and recommend changes based on their interpretation of the data.

The contract also included a provision for the organization of what was known as a joint project steering committee, which was composed of representatives of the Department of Health and Human Services, and USDA, who contribute data to the national nutrition monitoring effort. This committee met monthly with the contractor's scientific staff to discuss progress and preparation of the report; to relay the needs of the contractor and its expert staff to the appropriate agency; and to coordinate the agency responses for requests for data and data analyses.

The techniques used by the organization for which I work include the preparation of scientific reports, by a number of approaches that foster cooperation among organizations and individuals involved in any type of evaluation study. These techniques were known to the Government when we were the selected contractor. The provisions of the contract were developed and carried out cooperatively with a spirit of mutual trust and respect for the needs of the agency, as well as the independence of the contractor. Few, if any, problems occurred during the 22 month contract period.

In the report, which you have in front of you, few, if any, issues were raised that did not result in agreement on interpretation of the data available to us. Had there been issues of interpretation where no consensus was reached, the approach that we use involves inclusion of all interpretations, critical documentation, and scientific evidence that supports any of those differences in the conclusion.

The report was written by staff scientists and it was based on the views and interpretations provided by the scientists who served on the expert panel. The federation requires critical peer review of all draft reports by outside scientists, appointed by a different organization, i.e., the governing board of the federation, not the office that prepared the report.

This peer review ensures scientific accuracy, objectivity, and balanced presentation as much as possible. As indicated previously, you already have a copy of the report and in our written statement we have included chapter 7, which includes the recommendations which several of you have already alluded to.

The highlights of the recommendations, for the record, include concurrence with the recommendations contained in the first report, such as more timely release of data sets, further efforts to incorporate greater comparability and compatibility among components of this system. For example, NFCS, 1987 and 1988, CSFII in 1989 and HANES III all used the same food codes, food descriptors and nutrient composition data. Additional efforts to make data collection methods similar would be helpful. Increased efforts to assess certain population groups, as already mentioned, such as persons who are institutionalized, Native Americans, and persons who have no fixed address, such as the homeless and migrant workers.

The report also contains specific recommendations and suggestions on needs for the collection of dietary data; education of data users; increased responsiveness to needs of State and local data users; and resources to support research on methodology used in these types of surveys.

The report also contains recommendations on modification of the frequency and format of reports on the national nutrition monitoring system to respond to the needs of Congress and the several communities, and to make better use of available resources. Specifically, the report suggests that preparation of detailed update reports should be made only when the USDA and NCHS major survey data are both available, and that preparation of more limited updates be done on a regular basis. The report also recommends special topic reports, such as the one on iron nutriture, or the effects of dietary intake and cardiovascular disease should be prepared separately from the update report, because of the amount of time and effort necessary to do so.

In regard to the future needs and objectives of the system, the primary goal of the system should be to meet the needs of the data users. However, as in the past, it may not always be possible to address the many ever-changing and often competing requirements of the several user communities. Our efforts to prepare this second report indicate that the system does produce considerable useful data which can be used to prepare periodic update reports, and also to prepare reports on special topics on diet, nutrition and health.

The best features of the existing national nutrition monitoring system, such as those that provide data on food use, nutrient intake by major population groups and many aspects of the nutritional status need to be retained and strengthened. With adequate resources and continued cooperation an even better system, in which the separate components cooperatively functioned more effectively, could be developed. If the system is to succeed in the future, its goals must be clearly defined and clearly stated. But also the resources to accomplish those objectives must be made available.

I would be pleased to answer any questions you might have.

[The prepared statement of Dr. Fisher appears at the conclusion of the hearing.]

Mr. HATCHER. Mr. Brown.

Mr. BROWN. I concluded with the statement in the last panel that quoted from the summary chapter of the report, in which I said the main consideration is that you drive the introduction of change to make the separate components function more effectively as a system, are the needs of data users, and especially policy makers.

And I may have appeared to have been a little excited about defining who policymakers were, but let me just ask you, do you include Members of Congress as policymakers in that statement?

Dr. FISHER. I believe I would be foolish to do otherwise, sir.

Mr. BROWN. All right, we will consider that the definitive statement on the subject. I really wanted to pick up with Dr. Cross that little business about alar, because the committee spent quite a bit of time on that subject earlier in the year. I was not, at the time, aware of the fact that the real difference—I had assumed that EPA's position was, at least reasonable—but I did not realize that the problem that existed between EPA and NRDC was the use of two different food consumption surveys; NRDC using the more recent and EPA using what they considered to be the more reliable or comprehensive, and that the difference made a 100-fold change in the risk assessment.

What conclusions should we derive from that with regard to nutrition surveys? Would we be able to say that the more recent survey, which had the much smaller sample size, that it should have used a methodology which had a more reliable sample size? Are there any methodological conclusions that we can draw from this extremely important difference, which, as you pointed out, may have made a $100 million difference to agricultural producers, apple producers in this case?

Dr. CROSS. Yes, definitely. One of the things that needs to be considered is refining and changing our survey systems, and particularly, the "continuing survey". I would like to say that a "continuous survey" is a different phenomena survey system, would allow us both better sampling techniques, and also better sampling of some of the population groups that we are concerned about. In the NRDC report, for example, they dealt with a sample base of 485 children from the last USDA data. That is a very small number from which to extrapolate to a national impact.

Mr. BROWN. But you cannot criticize them for using the available, Government-produced data, can you?

Dr. **Cross**. Absolutely not. They used what was most recent and most current and which they thought, then, would be the best data from which to make their predictions.

You know, again these kinds of methodological issues will continue to come up and that is why we need an advisory board working with the two departments to help them determine what the samples should be, who should be included in the samples, how frequently to do them, and how to collect those samples in a way that we can extrapolate for policy purposes, either for questions like pesticide contamination or to questions like, what impact changes in fat substitutes may mean in food supplies.

Mr. **Brown**. Well, just that one example that you have given is of such sufficient importance, that it probably warrants a great deal more time to explore what can be done to see that that does not happen again. And, certainly if it is a question involving the methodology of nutrition monitoring.

But I do not want to belabor that. I just wanted to comment to Dr. Harris, who I thought, if I may say so, you made a very fair, restrained, objective analysis of the situation. We differ in our interpretations, but I appreciate the comments that you made.

I have been disturbed, as you have, about the fact that the Congress has not funded the budgetary requests for nutrition monitoring and nutrition information at an adequate level. To be honest with you, I do not think that the President asked for enough money in most of those years that you referred to and I am deeply disappointed that the Congress did not fund that much.

But I do have to make the point, and you can comment on it if you wish, that there may be some relationship between the degree to which Congress funds these requests and the degree to which they feel they are getting adequate information about a very complex system, and with which there is a great deal of criticism and a decided lack of desire to be responsive to these congressional criticisms.

That is one of the things that causes Congress to not appropriate as much money as might be desirable. Would you like to comment on that?

Dr. **Harris**. Yes, sir, I would. I do not want to be argumentative. You and I do disagree and that is quite appropriate.

I see it from the other side, and I see it having come into government not knowing what government was really about; not knowing a great deal about our nutrition monitoring system, but recognizing that Congress is a policy maker.

The report that Dr. Fisher was talking about was designed to give you information. I spent a great deal of time during the time that I was at USDA in coming around and talking to Members of Congress, trying to explain to Members of Congress what we were doing, through the ICNM and before that was started, through joint efforts just between my office and the office of Dr. McGinnis.

We sent letters. We tried, I think, diligently to tell you what we were about. Things are not going to change overnight. This is a process that is a long process. I cannot go back and re-get, recapture the 10 past years. But I do think we are at a point in time, where there has been real change. The committee that Dr. Fisher was responsible for looked at data that was collected in the 1980's, the middle part. They did not look at the data that will be coming out this year, from the 1987 NFCS. They did not look at the data that will be coming out next year, after the beginning again of the 1989 Continuing Survey of Food Intakes by Individuals. And they did not look at the new HANES III. These are where you are going to see the changes. The pipeline is somewhat long, maybe it needs to be shorter.

I am not going to sit here and tell you it is all perfect. It is not perfect. What I am asking for is to look at what other things you are adding on? What little extras that distract the attention from the real progress. Because monitoring does take considerable amounts of time and resources, even when they are conducted at the modest level they are conducted at now. To increase them further, it is not just money, it is lots of staff time, and I would urge you, in all seriousness, to consider carefully what is actually necessary.

Mr. **Brown**. I appreciate that, but, Dr. Harris, in all honesty, this complicated and expensive infrastructure that you referred to, it consists of an advisory committee and optional coordinator which the departments can use or not, and we put that in at the request of the administration.

The cost of the survey we have been talking about was over half a million dollars, the analysis by the society. I cannot believe that the entirety of the structure that is created in this bill would amount to half a million dollars, to be honest with you. I think you are tilting at windmills, honestly.

Thank you very much.

Mr. **Hatcher**. Mr. Emerson.

Mr. **Emerson**. Thank you, Mr. Chairman.

Mr. Chairman, it is important that we use reliable data and that the methodology that we use in arriving at that data be proven and correct. That fact has been made painfully apparent in a number of issues relating to nutrition and hunger over the years that I have served on the Agriculture Committee and the Hunger Committee, and I find that a lot of times, particularly in dealing with scientific subjects that are seized upon by the media, that if we are not really dealing with the facts, scientific subjects tend to lend themselves to a great deal of misunderstanding or to misconstruing.

Now, Chairman Brown held some hearings back in March before the DORFA Subcommittee on the alar problem, and, Dr. Cross, you asserted that the National Resource Defense Council's risk assessment numbers on alar in apples differed from the EPA's numbers, solely because of the use of different dietary information. That is at variance significantly with what Dr. Moore had told the subcommittee on March 2, when he said that the principal factor for the NRDC's inflated risk numbers was due to their reliance on poorly conducted scientific studies regarding the carcinogenic potency of alar. The studies that had been rejected by the scientific advisory panel some years before, in 1985, as inappropriate for determining dietary risk. He then indicated that the diet survey information relied upon by the NRDC was also flawed, but that would only account for a two-fold difference, a two-fold difference, between the EPA's risk assessment number. And he said that the 1985 study was too small for their needs, and that the larger 1977 study fit their needs more appropriately.

In addition, the results of the most recent survey made by the USDA were suspect, since the reporting requirements for the survey population, which was only 65 percent, and which was a percentage standard that the Census Bureau would not accept as reliable. I wonder if you would comment on that, because the alar issue, in particular, was greatly, I think, blown out of proportion in the national media. There were conflicting statements emanating from a variety of sources, some of whom were hired guns to spread this information. I just wondered if you would comment on that.

My point here is that it is very important that we do have reliable data and that the methodology be well-accepted by all parties needing access to it, in order to avoid misinterpretation and misrepresentation. I find you and Dr. Moore at great odds here in describing what occurred on the alar problem.

Dr. **Cross**. I think there are two issues that Dr. Moore referred to, and I was not here to hear his testimony. But the first was whether or not NRDC had accurately assessed the safety of various pesticides that they were looking at. I did not address that in my testimony. I looked only at given whatever they had determined was the risk, when they applied it to the population base, they came up with an estimation of some 6,000 preschoolers who they thought would be affected.

The issue that we are dealing with here is just the population surveys, that was the only thing I addressed, and I do not disagree with some of Dr. Moore's conclusions, at least some of the things I heard from EPA. Again, not having heard Dr. Moore specifically, about whether or not the safety of those pesticides, the safety risks were as great as NRDC predicted. So, I think there are two separate issues there, and certainly the most important—I mean, most of them are very important—first, the issue of scientific estimates of safety. And, then, second, the issue of what is the risk or the impact of that when you apply it to a population base. And that is, again, evidence for the need for continuous surveillance of the potential impact of either an additive in our food or pesticides or other ingredients that are added deliberately or accidentally, and what the safety and the risk of that might be.

Mr. **Emerson**. I see, Mr. Chairman, that my time is expired. I must have asked too long a question or got too long of an answer. I have a number of other questions I want to ask, but I would ask permission to submit them in writing and that they be included in the record, together with the responses.

Mr. **Hatcher**. Without objection.

Mr. **Emerson**. Thank you.

Mr. **Brown**. Mr. Chairman, may I make the same request, because obviously we are not going to cover all the subjects that we would like to cover here?

Mr. **Hatcher**. Without objection, it is so ordered.

Mr. Walgren.

Mr. **Walgren**. Thank you, Mr. Chairman.

Dr. Fisher, as was indicated earlier, the report of the expert panel indicates that it was not informed about the details of content and methodology in the current and planned surveys. The question is why was the content and methodology of those surveys not available for your review?

Dr. Fisher. I appreciate the opportunity to answer that question. I think a part of the answer to that question was given by Dr. McGinnis and also by Dr. Harris, in their answer to Mr. Brown, and I will repeat that.

The purpose of the effort was to provide a report on the update of the nutritional status of the U.S. population. Therefore, we were looking at data that had been collected during the late 1970's and the 1980's, we were looking at data that were analyzed and completely ready for evaluation.

There were already in the field efforts by USDA and CSFII and in the Food Consumption Survey, as well as HANES III, that are currently ongoing or just about completed. Those data were not yet collected or fully collected, and so the timeliness issue is a very important one in this aspect.

Even if we had had access to that information, it would have been helpful in making the recommendations, but it would not have been helpful in analyzing the data, because in some instances that data that was collected by the——

Mr. Walgren. Well, what about surveys before then? We are certainly interested in the recommendations. Did you ask for the information on methodology?

Dr. Fisher. It was available to the contractor, yes. There was a conscious decision on our part not to share that all with our experts, because scientists like to make recommendations, rather than evaluate data. It is much easier to make recommendations about something than it is to make a hard decision about data.

Mr. Walgren. When you say "we decided not to share it with our experts," who is "we" at that point?

Dr. Fisher. The contractor, me, the organization that was staffing the panel. We were aware of much of this, the information was available. When the committee or when our panel asked for this information, we provided it to them, but it was not a subject that we wished to have them spend much time on, because of the constraints of the contract in terms of the scope of work of the contract and the time available for it. That does not detract from its importance, whatsoever. It is an issue of timeliness.

Mr. Walgren. Well, let me ask you this: It says here that you were charged, the word is "charged," to address methodological issues in comparing data from different sources of times, and you were charged to identify the types of analysis necessary to make comparisons meaningful. Now, we have all this information in the pipeline, we have these people locking up on how they are going to ask questions between now and 1995, a lot of those questions have not yet been asked. How much did we pay for this study? I am curious, what was the contractor paid to——

Dr. Fisher. The contractor was paid $598,233, I believe.

Mr. Walgren. So, this contractor received about the amount that Congressman Brown anticipates the whole bill will cost for its total implementation? I just do not see how you can satisfy your charge of identifying the types of analysis necessary to make comparisons meaningful, if you do not allow your experts to make any recommendations or even see the data and the methodology that is currently being used. Will we not walk up to 1995 and will look back at this expenditure of $500,000 and say, well, we have got this data and it was collected in such a way, but it does not have anything to do with the recommendations that were made with the $500,000 we spent in 1988 and 1989? You know, it comes a point where it is real waste.

Dr. **Fisher**. Well, sir, either I am not communicating to you what I am trying to say or I am not understanding what you are saying. The committee and the contractor did have available to it methodology that was used to collect the data that was analyzed and evaluated to prepare the report.

In order to make recommendations for the future, beyond that which is already in place, would require an analysis and evaluation of the methodology that is going to be used in the future or the methodology that is being used now, and that was not a part of the contract. We would be glad to do it, but that was not a part of what we asked for.

Mr. **Walgren**. So, apparently, the problem then lies with the agencies, because they have specific plans for how to collect this data. They have made plans to collect data between now and 1995, and what you are saying is you were not asked to look at that at all, that that was not part of your analysis.

Dr. **Fisher**. That is correct, we were not asked to look at the methodology being used in the future and in the surveys that are now in place. We did look at the methodology that was used to collect the data that are reviewed in the report.

Mr. **Walgren**. So, essentially, the agencies have made plans and are going to carry them out, and the advice they asked for and the money they spent will give them advice that has not the foggiest thing to do with their plans and with their actions. So they will be able to come in here in 1995 and say that, while we were trying to do the right thing and we had no advice to the contrary, it sounds to me like somebody is really putting themselves in a position where no one will be able to criticize them whatsoever, even though we spent $500,000 to get them some advice.

Mr. Chairman, I am sorry, I do not mean to get the—you know, just from a common sense taxpayer standpoint, this stinks.

Dr. **Fisher**. Sir, if you would like, I would be happy to answer that question in detail in writing.

Mr. **Walgren**. Well, that is probably the best place for it, Mr. Chairman.

Thank you.

[The information follows:]

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Comptroller

October 4, 1989

The Honorable Doug Walgren
Chairman, Subcommittee on
Science, Research and Technology
2241 Rayburn House Office Building
United States House of Representatives
Washington, DC 20515

Dear Chairman Walgren:

This letter refers to my testimony at the Joint Hearing on Nutrition Monitoring Legislation, on September 21, 1989. At the conclusion of the presentations of the second panel, you asked about statements in the report of the Expert Panel on Nutrition Monitoring (EPONM), *Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring*, in regard to availability of information on comparability of methodology used in national surveys by the USDA and DHHS. Because my brief answers did not fully respond to your inquiries, I offered to provide a more detailed answer in writing.

If I interpreted your questions correctly, you were seeking clarification of the possible contradiction between the statement in the Executive Summary (p. xxiii), "The EPONM was also charged to address methodological issues in comparing data from different sources or times, and to identify the types of analyses necessary to make comparisons meaningful" and the statement on page 153 of Chapter 7 ("Recommendations"), "Because the EPONM was not informed about the details of content and methodology in the current and planned surveys, it is difficult to be specific in recommending many changes to improve comparability . . ."

While it may appear that these two statements are inconsistent, such is not the case. First, the scope of work of the contract charged the Federation and its Expert Panel to update the first report on the National Nutrition Monitoring System (NNMS) published in 1986 by comparing data in that report with data from NNMS surveys that became available since the first report was written in 1985-1986.

This charge included evaluation of the methodology by which available data sets were collected and analyzed. The statement on p. xxiii was made only in the context of this charge in the scope of work.

To meet this requirement in the scope of work, we asked the Agencies to provide data and information that had been collected and analyzed prior to December 1988 from a large number of components of the NNMS. The Agencies did provide this information and data to the Federation and its Expert Panel for consideration in preparing the update report on NNMS (September 1989). The specific data sets evaluated are identified in the EPONM report on pages 31-32 (Chapter 3), page 78 (Chapter 4), page 98 (Chapter 5), and page 136 (Chapter 6). The Expert Panel answered the charge to address methodological issues in Chapter 2 of the report ("Appropriate Uses of Survey Data in the Assessment of Dietary and Nutrition-Related Health Status") which details the fundamental considerations related to methodology, comparability, and compatibility in the data evaluated. In addition, whenever methodological considerations constrained the interpretation of specific data discussed in Chapters 3, 4, 5, and 6, the constraints were described and the changes or additional analyses to enhance interpretation were noted.

Second, in terms of making recommendations, the EPONM was specifically charged ". . . to recommend ways to strengthen the NNMS based on **experiences involved in reviewing data analyses for this** report" (emphasis added). The Federation and its Expert Panel examined data that were collected and analyzed prior to December 1988 and did not examine the methods being used to collect data in NFCS 1987-88, CSFII 1989, or NHANES III 1988-1994 because the data were either not yet analyzed completely (NFCS 1987-1988) or not collected and analyzed as surveys were ongoing (CSFII 1989; NHANES III 1988-1994). Because the contract scope of work called for evaluation of existing data and information, the Federation staff focused the discussions of the Expert Panel on those topics and, as stated on page 153, did not provide them with information on "the details of content and methodology in the current and planned surveys".

Indeed, we and the Expert Panel were well aware that many of the recommendations on methodological issues made in the 1986 report on the NNMS had already been incorporated in ongoing surveys. However, the recommendations of the 1986 report on the NNMS were not reflected in the two major data sets available to the EPONM (CSFII 1985-1986 and HHANES 1982-1984) because these two surveys were planned and essentially conducted prior to completion of the 1986 report.

In summary, the Expert Panel evaluated data and information available as of December 1988, but was not charged to evaluate current and planned surveys; thus they were not expected to be fully aware of the extent to which previous recommendations had been implemented in current and planned surveys or the impact of the changes on the resulting data. These changes will be evaluated when the next NNMS update report is prepared in 1991. Nonetheless, the Expert Panel was able to make recommendations to strengthen the NNMS based on its analyses of NNMS data and information that became available up through December 1988.

Your interest in additional evaluation of methodology and comparability of data from current and planned surveys is most appropriate. We endorse the idea that these topics should be included in the next update report on the National Nutrition Monitoring System.

Thank you for the opportunity to respond to your inquiries on this matter. We trust this information addresses the concerns raised in your question. We would be pleased to provide further information if you or your colleagues have additional questions.

Sincerely,

Kenneth D. Fisher, Ph.D.
Director
Life Sciences Research Office

KDF:blf

cc: Chairman G.E. Brown, Jr.
Chairman C. Hatcher

Mr. **Hatcher**. Mr. Browder.

Mr. **Browder**. Thank you, Mr. Chairman. I have no further questions.

Mr. **Hatcher**. OK. I would like to thank each of you for being here today and for your testimony.

We have one final panel: Dr. Patricia Swan, associate dean, graduate school, University of Minnesota, representing the nutrition, health and scientific societies, Minneapolis, Minnesota; Ms. Agnes Hinton, director, nutrition services, bureau of personal health, Mississippi State Department of Health, representing the Association of State and Territorial Public Health Nutrition Directors, Jackson, Mississippi; and Ms. Patricia Adrian, chairman, Food Policy and Public Affairs Committee, of the National Cattlemen's Association, representing the food and agriculture organizations, based here in Washington.

You all have been in the audience, so you know that we will take your entire written statements and make them a part of the record, and we will hear from you in whatever fashion you would like to proceed.

First, Dr. Swan.

STATEMENT OF PATRICIA B. SWAN, PROFESSOR AND ASSOCIATE DEAN, GRADUATE SCHOOL, UNIVERSITY OF MINNESOTA, ON BEHALF OF NUTRITION, HEALTH, AND SCIENTIFIC SOCIETIES

Dr. **Swan**. Thank you, Mr. Chairman.

My name is Patricia Swan, and I am pleased today to represent a group of professional societies and other groups who strongly support passage of nutrition monitoring legislation. I have submitted to you written testimony which I hope you will enter in the record on behalf of that group of societies. I would like now to make a few additional remarks, if I may.

We have heard today testimony about considerable progress in nutrition monitoring activities brought about by lots of good-will and voluntary cooperation. I believe, however, that we still have a great distance to go in order to achieve a true nutrition monitoring system for our country.

The interest of the Congress in this problem has been largely responsible, I think, for the progress that we have seen to date. Congress can continue to help to bring about this nutrition monitoring system by passing legislation that clarifies what we expect from a national nutrition monitoring system.

If you consider today, we have had some testimony that we have such a system. If you look in my written testimony, you will see that I assert that we do not have such a system. Clearly, there is a difference of opinion as to what it takes to actually call our activities a truly coordinated system. I believe that we need more coordination before we can actually say that the activities that we have are really a nutrition monitoring system. So, you can help by passing some legislation that requires a plan that specifies, describes this system and clarifies for us what is this monitoring system and requires the coordination required to bring it about.

It should provide, I believe, for strong coordination. I think the legislation should also provide for regular expert advice and input from the users of the data. That is important for the ongoing help, if you will, of these monitoring activities. So, the Congress can help if they will put in the legislation a requirement that the plan have these components.

We have also heard discussion about timeliness of data dissemination. This is a concern. We have heard discussion about adequate evaluation. Certainly, we need to have available to users descriptions of the methodology used for arriving at the data that we have, because you cannot use data correctly, you cannot draw well-founded conclusions from that data, unless you know how the data were obtained.

The Congress can help, then, if their legislation describes to some degree what we mean by timely and adequate presentation of data and evaluation of those data.

The testimony from the departments this morning has described improvements in nutrition monitoring activities. These are real. The nutrition monitoring activities have improved. They have improved as a result of your interest in the subject, they have improved also as a result of genuine desire on the part of those who are implementing these programs to, each year, improve the programs that they are implementing, and they are to be commended for what they have done, as you are to be commended for your interest and encouragement in this.

But if you listen carefully to the testimony, you can see evidence in the testimony of the departments of the problems that they have. I will just give you a couple of examples.

They have talked of plans. They have presented testimony to you about plans for more coordination between the major surveys. But if you read their testimony carefully and listen carefully to what they say, it is clear that they have not been able to implement all those changes which they themselves say would be desirable. So, they have only been able to implement in current surveys in the field a part of those changes that they could identify as helping in the area of coordination. So, it is clear that there has been some failure in cooperation, some failure in coordination that has occurred within this voluntary system.

Another example, the most recent Nationwide Food Consumption Survey was completed last year, and they have testified in that regard, but they are silent on their progress to date in providing the data from that survey and it looks as if timeliness may once again be under question—just a couple examples of the way in which, if you listen carefully to the testimony, you see not only real evidence of progress, but real evidence of problems as well.

Methodology in many aspects of monitoring and surveillance is not adequate. Departmental witnesses and other witnesses today have testified to that fact. Congress can help, once again, by providing legislation that specifically authorizes a research program in this area.

Finally, if, as a result of the legislation that you are currently considering, the departments do provide you with a feasible plan for a true nutrition monitoring system, the Congress will then need to consider what resources will be required to implement that plan. I think it would be helpful if you ask those whom you are asking to develop the plan to also provide you with a realistic estimate as to the needed resources to implement that plan.

I would be remiss if I did not take this opportunity to thank you for your past support of this legislation. It has been very important to improving the monitoring activities that we have. You have made a difference already in the quality of the data that are available, and I would assert that the data which will come in the next few years will be truly different as a result of your interest, as well as the interest of those who are implementing the programs.

With your continued support, we will yet obtain an effective nutrition monitoring system, as opposed to the separate activities that we now have, so that we can all better carry out our efforts to improve the Nation's health.

Thank you.

[The prepared statement of Dr. Swan appears at the conclusion of the hearing.]

Mr. Hatcher. Thank you.

Ms. Hinton.

STATEMENT OF AGNES W. HINTON, DIRECTOR, NUTRITION SERVICES, MISSISSIPPI STATE DEPARTMENT OF HEALTH, ON BEHALF OF THE ASSOCIATION OF STATE AND TERRITORIAL PUBLIC HEALTH NUTRITION DIRECTORS

Ms. Hinton. The Association of State and Territorial Public Health Nutrition Directors is an organization of nutrition professionals representing the health agencies of the 56 States, territories, districts and commonwealths, and we very strongly support the need for this legislation, the National Nutrition Monitoring and Related Research Act, and specifically support H.R. 677. This legislation, we believe, will provide this country a coordinated, integrated and timely system for nutrition monitoring.

We feel that the need for this has only intensified since 1984, when oversight hearings were first begun, when legislation was first introduced. From the State perspective, there has been a steady increase in the competition for our limited resources. There has been a steady increase in the need to allocate those resources in the most equitable manner. We need timely, complete and reliable data so that we can do this and so that we can evaluate the programs that we have in place.

We do appreciate the progress that has been made and commend the departments for this, but we also feel that the current progress could easily be eradicated by a change in administration of key personnel in lead agencies, which clearly again points out the need for legislation.

As health departments, we are charged with the responsibility for promoting and protecting the health of the public, and to do this, as I mentioned, we need data. Some States—specifically, Massachusetts, New York, Texas, as examples—have been able to conduct limited State nutrition surveys to determine specific nutrition problems and have used this data to secure State funding to expand food programs such as WIC. However, most States, like my own, do not have the resources to attempt comprehensive surveys and must continue to rely on the Federal Government for leadership in the collection and interpretation of nutrition status data, which is one of the reasons this is so critical that this system be in place.

Today, as you heard about a variety of data sources, of course, NHANES, NFCS, and depending on who is counting, at least 30 other data sources, the majority of these data sets exist independently of each other. Within this mountain of data, there is some overlap, some gaps, many inconsistencies, and virtually no way to put any combination together to get a complete picture of the dietary habits and nutritional status of the American public.

We in the States need a system that coordinates those studies, so that the results can be used to portray an accurate picture of our citizens and identify those with problems who are most in need of services. With such data, we can develop programs that target specific problems.

We need more specific information about groups who are most vulnerable to nutrition problems. The current sampling methods used for most of these studies results in undersampling those most likely to have nutrition problems. And certainly we do applaud the inclusion in this legislation of the requirement to develop and plan for the continuous monitoring of high-risk groups.

You have heard alot about the need for timely information and the fact that we do not have this. We have seen this relating to the setting of the year 2000 objectives, we have seen this in trying to evaluate goals at the State level. I am sure you can understand that it is difficult to convince State legislators that they should fund programs to meet needs that we cannot accurately describe or evaluate.

We must know trends in nutrition status and dietary habits. The population of the United States represents the proverbial moving target. While the continuing food consumption survey has addressed this need, we also need the same type of information on health status, on food program utilization, and composition of the food supply. If we had had such a system, this might have allowed us to predict the increase in the use of emergency food programs over the past several years and to have instituted programs to alleviate inadequate access to food programs earlier.

There is a need for new methods and we need to monitor trends in food consumption and nutritional status. With all the technology available to us, we still do not have easy to use, accurate or economical methods for determining what people eat. The State of California recently developed a telephone survey to determine eating habits. It cost them $50,000 to develop, but yet they do not have the evidence they need to be assured of the validity of their work. That is just an example of one State trying to do something on their own, because they have not felt their needs have been met from the Federal level.

Perhaps our greatest need in the States is for technical assistance, the sharing of the knowledge and expertise of those who work on these Federal projects with our staffs. Certainly, we acknowledge the resources that are available at the Federal level are much greater than those of ours at the State. Over the years, the Federal agencies have become much more open and have shared vast amounts of data with us, but we do need more than copies of computer tapes and printed reports.

We would like assistance in interpreting and using the data, in setting up local data bases and in supplementing the national data. I use this as a positive example of what the nutrition staff at the Centers for Disease Control have done in working with the States to set up specific State systems. We need this type of assistance from other areas of the government, and the plan required by this legislation would give a great deal of impetus to this sharing.

Finally, as users of the nutrition data, we need to participate in the planning of the various studies and surveys. We would like to have the opportunity to propose the questions that we believe need to be answered, in order to plan effective programs. We would like to participate in the setting of priorities and making of decisions about how surveys are conducted, the type of data to be gathered and, most critically, how that information will be distributed.

Even without additional funding, this legislation has a number of features that make it especially important to State health departments. First is the centralization of nutrition monitoring activity with the requirement for a written plan and regular reports to Congress, the provision of technical support to the States, inclusion of a program of grants to the States, the requirement for a budget for nutrition monitoring activity, and, finally, the requirement for an advisory committee to the program.

We especially appreciate the inclusion of this advisory committee as it provides the first formal opportunity for users of nutrition monitoring data to provide input and guidance to the Federal agencies about their needs. It is vital that the end users in public health be included, as well as academicians who are typically viewed as users of this data.

You have heard about the call from various groups for improvement in the nutrition monitoring system, and I will not reiterate those, but I feel these very current recommendations do underscore the need for improved coordination of current surveys and for many of the things called for in this legislation.

As I mentioned, we do support H.R. 677. We are aware that there is another bill, H.R. 1608, introduced. Many of the provisions of H.R. 677, which was previously passed by the Congress, would be carried out very differently in H.R. 1608. As mentioned, our association and our parent organization, the Association of State and Territorial Health Organizations, have testified supporting nutrition monitoring since 1984. We worked closely with modifications of the original bills, and it was partially because of our recommendations that the provisions for the advisory council were strengthened and the grants programs for State and local governments were added. Unfortunately, H.R. 1608 contains no grants programs and no advisory council, as well as additional problems which I have spelled out in my written testimony.

In summary, the discussion for the need for nutrition monitoring began in the late 1970's and it has been discussed in both Houses of Congress almost every year since. As I was describing to my 16-year-old daughter why I was coming here today, I told her a little bit about that background. It was difficult for her to understand why this legislation is not current law. I hope that I will be able to tell her that within this current session of Congress, you have made it law.

Thank you.

[The prepared statement of Ms. Hinton appears at the conclusion of the hearing.]

Mr. HATCHER. Thank you, Ms. Hinton.

Ms. Adrian, we have a vote on the floor of the House and we would like for you to wait until we come back to testify. We will be back and we will reconvene at approximately 12:15 or shortly thereafter, and we would like for you ladies to stay for questions.

Thank you.

[Recess taken.]

Mr. HATCHER. The hearing will reconvene.

Ms. Adrian, please proceed.

STATEMENT OF PATRICIA ADRIAN, CHAIRMAN, FOOD POLICY AND PUBLIC AFFAIRS COMMITTEE, NATIONAL CATTLEMEN'S ASSOCIATION, ON BEHALF OF FOOD AND AGRICULTURAL ORGANIZATIONS

Ms. ADRIAN. Thank you for the opportunity to testify on proposed nutrition monitoring legislation. I should tell you that, while I am chairman of the Food Policy and Public Affairs Committee for the National Cattlemen's Association, I am a rancher from South Dakota. My husband and I are in the ranching business, and I am very used to delays of all kinds, for all kinds of reasons, so this is just like being at home.

I have been recently much more concerned about whether we are going to get rain in West and South Dakota for the pasture and cropland in cattle country than I have been specifically geared into this particular issue, but I do think that the long-range effects of what you do here is going to have a lot more effect on my business than whether we have rain today or tomorrow.

So, I am representing the National Cattlemen's Association and a coalition of leading agricultural producer groups, and I will not go into the details on that. You do have a list of those. Also, you have our written testimony and I am going to summarize or highlight what you have and add a little philosophical comment.

We supported nutrition monitoring legislation in the last Congress, and we support such legislation in the 101st Congress. We support nutrition legislation, for two basic reasons—and when I say "we," this is the position of those agricultural organizations that you have listed.

First, the legislation would provide for a continuing national nutrition monitoring system. Such a system is needed in order to know and to understand the nutritional health of our Nation. We need to know how we use food and how our food choices are changing. We need to know the nutritional status of the different segments of our society. Those of us concerned about food and our Nation's health, including nutrition policymakers in Congress and the executive branch, must have accurate and timely information on which to base policies and programs. No decision can be any better than the underlying information.

Second, the legislation would require use by agencies of accurate nutrition and nutrient data information. Agencies would be required to work in a coordinated way and to speak with one voice on matters of nutrition, especially when making dietary recommendations.

An additional reason is that, as a food producer, I am charged with supplying the product that we are talking about for the dietary guidance of the country. I must make decisions for our ranching operations, as other agricultural producers must make decisions, based upon the policies that you set here and in the agencies.

Recently, coordination within and among agencies and departments has improved. New data on the nutrient content of today's more closely trimmed beef will update USDA's nutrient composition handbook 8-13 on beef. As soon as it is published, other agencies should use this information, which more accurately reflects this leaner, trimmer beef.

The Food and Agricultural Act of 1977 designated USDA as the lead department in nutrition matters, while Health and Human Services oversees work on diseases. Relationships between certain diseases and diet have become a major focus of the National Institutes of Health. All of this work should be better coordinated and proposed legislation could help accomplish such needed coordination, coordination which translates into dietary recommendations.

I would like to comment briefly on dietary guidelines. We do have it more fully covered in our written testimony. USDA and HHS jointly develop the "Dietary Guidelines for Americans." The coordination of these two departments, which make dietary recommendations for nutrition and health, is appropriate and necessary. These guidelines should reflect changes in the food supply, food buying trends and the Nation's eating habits, while continuing to stress the implementation of sound nutrition principles.

The "Dietary Guidelines for Americans" are for the population at-large, and for that reason should remain qualitative, not quantitative. We select and eat foods. We do not eat percentages, nor do we consume nutrients in isolation. We eat foods in combination of foods. The "Dietary Guidelines for Americans" can help Americans know how to select foods to build a better diet for their good health. We trust the next edition of "Dietary Guidelines for Americans" will contain such practical, easy to implement information and advice which can improve the American diet and thus the health of our Nation's people.

Except for that particular coordinated effort for the dietary guidelines between USDA and HHS, there is not a mandated, formal mechanism for coordinating the work of those two departments. Although they have worked together more closely recently, there is not a mandated system insuring continuous coordination. Achievements at this point depend primarily on the good-will and efforts of individual agency personnel.

Finally, as I have stated before, I am a food producer. My industry—and here I am speaking about the beef industry, in particular—has made changes to reflect the dietary guidance espoused by "Dietary Guidelines for Americans." We have a great economic and emotional stake in providing a nutritious food supply for consumers. American agriculture has provided a strong economic and nutritional base for this country. We are prepared to continue to do this, but we need to have a consistent message based on current information for us, as producers and for the American consumer. The long-term health and welfare of the public, not just the viability of agricultural producers, depend on Congress' passage of well-designed nutrition legislation and on the departments and agencies' implementation of such legislation.

Thank you.

[The prepared statement of Ms. Adrian appears at the conclusion of the hearing.]

Mr. HATCHER. Thank you. I would encourage you to continue working on that beef. I have high cholesterol, but I do not want to give it up.

Ms. ADRIAN. OK.

Mr. HATCHER. Mr. Brown.

Mr. BROWN. I want to thank all of you for your contribution. I think it is extremely important that the sectors and groups that you represent take a stand on the issue before us here.

Ms. Adrian, you discussed the question of dietary guidance and some of the problems that we have had in the past, and they have been very deep and emotional problems in this area, as I am sure you recall. But do you feel that, in addition to the dietary guidance provisions, the other aspects of this bill are also important to your industry and to the country?

Ms. ADRIAN. Well, I think it is important that we monitor food trends, that we know what people are eating, that we know the various needs of the different segments that we talked about this morning. I specifically talked about general nutrition information more for the healthy American than anybody that has specific problems. But yes, I think the bill in itself has a lot of strong points beyond just dietary guidance.

Mr. BROWN. Did you have any reaction to that discussion of the alar problem and the fact that, to some extent—and we will not say fully, but to some extent—that was based on a lack of adequate dietary intake information with regard to children?

Ms. ADRIAN. I think that one of the challenges that we have definitely, whether it is alar or whether it might be other things that may be on the horizon that we do not know about, is the fact that we need a method of disseminating information that is beyond just the sensational part of anything, so that we cannot overreact to issues.

Mr. BROWN. Well, there are two phases to that problem, as was brought out during the discussion. First, we did not have adequate dietary intake data or the special subgroup that was involved here at risk, young children; second, our methodology for assessing cancer risk is extremely imperfect also, and the two worked together in this case to give us a worst possible scenario, and it was very bad for the apple industry as a whole.

Of course, I am not claiming that better data would have alleviated the problem completely, but it certainly would have helped to avoid the kind of public apprehension that developed so strongly in that case.

Ms. Hinton, I would like to just ask you one general question. As you know, there has been a trend in recent years for the Federal

Government to rely more on the States to carry out many programs and to pay for the cost of carrying them out. As far as you know, has the Association of State and Territorial Public Health Nutrition Directors been asked by the Departments of Agriculture and Health and Human Services to participate in planning for the monitoring studies and surveys or asked about what your needs are in connection with structuring these surveys?

Ms. HINTON. Mr. Brown, we do not participate in any formal advisory committee. It would be one way of answering that. There have been some informal requests from the department to our association, both HHS and USDA, regarding the surveys, and in some of those we have provided information back to them. Many of the things we have asked for, I must say, have not been forthcoming. A specific example, about five years ago, in a data conference that we had after one of our annual meetings, we had representatives from the various agencies and were told at that time that USDA was working on some State-specific modules that might be able to give us some State-specific information. Again, earlier this year, at the Project LEAN meeting, I heard that this was in progress, yet, when I contacted the department to try and get that information for my State, I was told it was still in the planning stages.

So, we have done some things informally. We have not, I believe, as an association, we do not participate in any formal input in the departments' surveys.

Mr. BROWN. Well, let me also thank each of you for indicating in a positive way that there have been improvements in the system here. Sometimes, because of my own frustrations in this matter, I tend to overreact a little bit and not adequately recognize the fact that we have a good system and it is improving, and I want to emphasize that for the record and to thank you for your contribution to that. But that still does not mean that we do not need to make additional improvements, particularly those that improve quality and reduce costs. These are extremely important goals for us to have for all of our programs at the present time, and that is what our purpose is in going through this little exercise we are going through here.

Thank you, Mr. Chairman.

Mr. HATCHER. Thank you.

I would like to thank each of you for being here today and for your testimony. Thank you very much.

This concludes the hearing.

[Whereupon, at 12:35 p.m., the subcommittees were adjourned, subject to the call of the Chair.]

[Material submitted for inclusion in the record follows:]

DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service

Office of the Assistant Secretary
for Health
Washington DC 20201

STATEMENT

BY

J. MICHAEL McGINNIS, M.D.

DEPUTY ASSISTANT SECRETARY FOR HEALTH

(DISEASE PREVENTION AND HEALTH PROMOTION)

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

BEFORE THE

SUBCOMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH, AND FOREIGN AGRICULTURE
AND THE
SUBCOMMITTEE ON DOMESTIC MARKETING, CONSUMER RELATIONS, AND NUTRITION
OF THE COMMITTEE ON AGRICULTURE

AND THE

SUBCOMMITTEE ON SCIENCE, RESEARCH, AND TECHNOLOGY
OF THE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

HOUSE OF REPRESENTATIVES

September 21, 1989

Mr. Chairman, I am Dr. J. Michael McGinnis, Deputy Assistant Secretary for Health for Disease Prevention and Health Promotion with the Public Health Service of the U.S. Department of Health and Human Services, and Chairman of the Department's Nutrition Policy Board. I appreciate this opportunity to discuss with you progress we are making in monitoring the nutritional status of the United States population and in providing timely dietary guidance related to disease prevention and health promotion.

In my testimony today I will (1) provide a brief overview of DHHS nutrition monitoring activities, (2) highlight several activities with particular potential for enhancing nutrition monitoring methods, and (3) review ways we coordinate nutrition monitoring and dietary guidance efforts.

Nutrition Monitoring in DHHS

The National Nutrition Monitoring System (NNMS) is a complex assortment of surveys and surveillance activities that provide regular information about the adequacy and safety of U.S. diets, the nutritional status of the population, and the factors that affect diet and nutritional status. Key components of the system are the DHHS Health and Nutrition Examination Survey (NHANES) and the USDA Nationwide Food Consumption Surveys (NFCS). These are complemented by at least 30 other Federal surveys and surveillance systems, primarily of DHHS and USDA.

The goals of the NNMS are included in the "Operational Plan for a National Nutrition Monitoring System," submitted to Congress in 1987. The Operational Plan is an updated version of the 1981 Implementation Plan. Achievement of the plan's goals and increasing the overall effectiveness and productivity of nutrition monitoring efforts are the responsibility of the government-wide Interagency Committee on Nutrition Monitoring (ICNM), established in June 1988. The ICNM is co-chaired by the Assistant Secretary for Health, DHHS, and the Assistant Secretary for Food and Consumer Services, USDA, who have oversight responsibility for implementation of NNMS activities.

At the Federal level, information from the NNMS contributes to policy development and program planning decisions related to nutrition education and information dissemination, nutrition services, and regulatory issues such as nutrition labeling and food fortification. Data from some surveys conducted by the monitoring system can be used by the nutrition research community in epidemiologic research to study the relationships among diet, nutritional status, and disease. Finally, the NNMS provides information useful for tracking progress toward achieving the National Health Objectives.

I would like now to highlight several DHHS monitoring activities in order to provide a sense of their breadth and to illustrate some of the uses to which the data are put. A comprehensive description of all Federal nutrition monitoring activities will be published this fall in Nutrition Monitoring in the United States: The Directory of Federal Nutrition Monitoring Activities, currently in press.

Centers for Disease Control (CDC): Two CDC centers have major nutrition responsibilities. The National Center for Health Statistics (NCHS), the Federal government's principal health statistics agency, conducts a broad program of data collection and interpretation on all aspects of health, including nutrition. NCHS data systems provide nutrition-related information from personal interviews, examinations, epidemiologic follow up, and review of health care provider and vital records systems. The major nutrition program of NCHS is the National

Health and Nutrition Examination Survey (NHANES). Two national surveys have been completed--NHANES I conducted in 1971-1974 and NHANES II in 1976-1980. A survey of Hispanic Americans, the Hispanic Health and Nutrition Examination Survey was conducted from 1982-1984. The most recent National Health and Nutrition Examination Survey (NHANES III), which I will describe in more detail later, began in October 1988.

The second CDC component is the Center for Chronic Disease Prevention and Health Promotion (CCDPHP). Through its Pregnancy Nutrition Surveillance System and Pediatric Surveillance System, this center continues the CDC tradition of working with States to package readily available data in a way that is useful for nutrition monitoring at the State level. Forty States participate in the Pediatric Surveillance System, which provides information about the prevalence of overweight, underweight, retarded linear growth, and anemia among high-risk children. Fourteen States participate in the Pregnancy Surveillance System and collect data among high-risk pregnant populations about anemia, abnormal weight changes during pregnancy, birth weight of the child, and whether breast or bottle feeding is used and for how long.

The center also conducts the State-based Behavioral Risk Factor Surveillance System that routinely collects data on the prevalence of behavioral risk factors associated with premature death and disability. These include nutrition-related risk factors such as obesity, hypertension, excessive alcohol consumption, and lack of physical exercise. Thirty-six States participate in this system, which began in 1984. The information obtained is used by States in program planning and monitoring of trends.

A new initiative, Surveillance of Severe Pediatric Undernutrition, is testing the feasibility of collecting information on cases of severe pediatric undernutrition in collaboration with four State health departments. I will describe it later.

CDC data systems serve a variety of purposes. Prevalence estimates and other descriptive information helps in program planning at both the State and Federal levels by contributing to our understanding of the nature and magnitude of nutrition-related health problems in the population. Surveys such as NHANES provide national reference data that can be used as bench marks for smaller studies and in clinical practice. One of the best examples of this application is provided by the NCHS/CDC Growth Charts that are used to monitor the growth of children both here and abroad. The data from these surveys are also vital to assessing the need for changes in fortification policies and other regulatory activities which assure the nutritional quality of the food supply. Finally, these surveys are used in epidemiologic research.

Food and Drug Administration (FDA): A variety of FDA programs generate NNMS data on the safety of the food supply; food labeling practices; surveillance for adverse reactions to foods; and public attitudes, knowledge, and practices about food and nutrition. The Total Diet Study monitors on an annual basis the levels of selected food contaminants and selected nutrients in representative diets. The Food Label and Package Survey (FLAPS) tracks industry labeling practices on a biennial basis, with emphasis on trends in nutrition labeling and declarations of specific nutrients of public health concern such as sodium, fatty acids, and cholesterol. Through the Diet and Health Survey, FDA periodically surveys the public's attitudes and knowledge of nutrition-related health problems such as hypertension, hypercholesterolemia, coronary heart disease, and cancer.

The FDA not only contributes data to the NNMS through its own surveys. It also helps to plan, analyze and interpret other major surveys of the NNMS in order to obtain information about Americans' intake of foods, food components, and supplements; their health and nutritional status; and the relationship of diet to health. Regular funding support is also provided to several health surveys conducted by CDC's National Center for Health Statistics. The FDA uses the information gained through NNMS surveys to monitor trends in exposure to both beneficial and harmful substances in food, and to evaluate the need for revisions in food fortification, labeling, and food safety policies.

National Institutes of Health (NIH): The NIH is the major agency in the Federal government that supports nutrition research and training as it relates to disease prevention, health maintenance, human development, and disease treatment--over $261 million in Fiscal Year 1987. As reported by the Human Nutrition Information Management (HNRIM) System, for Fiscal Year 1987, this represented 93 percent of the DHHS expenditure or 73 percent of total Federal expenditures in nutrition research and training. The NIH and its Clinical Nutrition Research Units and Centers support and conduct research on nutritional status assessment and epidemiological nutrition research. Fiscal Year 1987 expenditures for these two categories were $27 million and $29 million, respectively.

The NIH studies to develop improved methods of measuring dietary intake, biochemical and clinical indices of nutritional status, and other monitoring-related research are integrated into existing nutrition monitoring programs such as NHANES. In addition to this methodological support, the NIH continues to provide yearly funding for NHANES, and it performs follow-up studies using NHANES data in order to study the effect of diet on overall health and longevity and to test hypotheses about the relationship of dietary practices to the incidence of diseases and conditions such as cancer, cardiovascular disease, obesity, and osteoporosis.

NIH epidemiologic research coupled with clinical and basic research and information from nutrition monitoring activities has lead to recommendations related, for example, to prevention of heart disease and cancer. Results of surveys on dietary and health practices and attitudes conducted by the NIH, often in collaboration with other NNMS component agencies, have contributed to the development of nutrition education materials and information dissemination to health professionals and the public.

The nutrition research efforts and education programs of the NIH are coordinated through the NIH Nutrition Coordinating Committee in the Division of Nutrition Research Coordination. The NIH, again through the Division of Nutrition Research Coordination, also serves as the executive secretariat for the Interagency Committee on Human Nutrition Research (ICHNR). In that capacity, it maintains the Human Nutrition Research Information Management (HNRIM) System. I would like to submit the recently issued Sixth Progress Report on the HNRIM System for the record. This report provides Federal nutrition research and training expenditures by agency for Fiscal Years 1983 through 1987 using a common definition of human nutrition research agreed upon by the ICHNR.

Recent DHHS Nutrition Monitoring Activities with Methodological Research Components

Third National Health and Nutrition Examination Survey: NHANES III is the latest of a series of studies begun in 1971 involving health and dietary interviews, physical examinations, and diagnostic and biochemical testing of a representative sample of Americans. NHANES III has two primary nutrition objectives: first, to provide data for the monitoring of nutritional status, including tracking of nutrition-related risk factors and estimation of the prevalence of compromised nutritional status; and second, to provide information useful for studying the relationship between diet, nutritional status, and health.

The nutrition component of NHANES III includes body measurements, blood tests for selected indicators of nutritional status, and food frequency and 24-hour dietary recall methodologies that will be used to determine the nutritional status and dietary intake of the population. Interviews also include questions about factors that may influence nutritional status such as meal program participation, the nature of home water supply, history of anemia, infant feeding practices, use of vitamin/mineral supplements, and eating habits and lifestyles.

Because of the growing interest and concern about food security, several groups recommended that NCHS develop and test methods for relating this issue to health. These included the President's Task Force on Food Assistance and a report on "Hunger Surveys in the United States," sponsored by the University of California at Berkeley. NCHS developed and rigorously tested a number of food security questions that were modeled on the one used in USDA surveys and those used in the Connecticut Childhood Hunger Identification Project. The revised questions were incorporated into the NHANES III, and, once the data are collected and analyzed, they will provide a unique opportunity to relate food security responses to detailed nutritional and health status measurements.

NHANES III represents an improvement over earlier surveys. In addition to the food security questions, new features include a longitudinal component that will allow follow-up and possible reexamination;

automated data collection; and long-term biological specimen banking. These features will increase the scientific yield from the survey and will allow for greater timeliness and responsiveness. In addition, the age range of the NHANES sample has been extended to include persons ages two months and above. Special sampling of infants, children, the elderly, and minority groups such as blacks and Mexican-Americans will also permit estimates of the health and nutritional status of these groups.

NCHS is completing the first year of data collection for NHANES III. The survey has visited 14 communities throughout the U.S., and over 5,000 people have participated in the interview and physical examination. This represents a response rate of 78 percent--higher than that achieved in similar surveys in the 1970s and 1980s. The automated data collection installed in the examination centers allows access to data within weeks of its collection, and plans are underway to automate the household interviews.

Surveillance of Severe Pediatric Undernutrition: State health departments in four states--Florida, Louisiana, Massachusetts, and Mississippi--are participating in a CDC-funded pilot surveillance activity on severe pediatric undernutrition. In selected urban and rural sites in each State, nutritional status data are collected from a variety of health care providers, including hospital inpatient wards, outpatient clinics, emergency rooms, health management organizations, and such non-medical sources as day care centers and preschools in high-risk areas. Cases are identified on the basis of documented underweight, severe anemia, or clinical malnutrition. Each potential case identified is followed up to confirm the diagnosis, and a questionnaire is administered detailing the child's health history, home and caretaking environment, and participation in food and nutrition programs. Food security questions are also included in the questionnaire. These ask whether the child or family has taken meals in a soup kitchen or family shelter or has had to skip meals because of lack of resources to buy food. In cases where resources have been inadequate to provide food, the specific circumstances are further documented. Follow-up is undertaken to assure that appropriate medical and social services are provided. Results will be available in 1990.

This surveillance mechanism is intended to serve as a model that other States and localities could use to better define the prevalence of severe undernutrition cases in high-risk populations, to define the risk factors that may explain the occurrence of these cases, and to arrange for appropriate intervention and follow-up. The results should provide insights into the association of food security responses on the questionnaire and the nutritional status of the children. Since the questionnaire is only administered to the caretakers of children who meet the case criteria for severe undernutrition, these data will not provide a statistically adequate basis from which to relate food security to nutritional status in the general or entire low-income population.

Development of a Core Set of Indicators to Assess Nutritional Status of Low-Income Populations: A recent assessment of DHHS nutrition surveys and surveillance activities related to low-income populations concluded that measurement of nutritional status is constrained because there is no set of agreed upon core indicators of nutritional status that would enable comparison of findings from the variety of DHHS data sources. As a step toward alleviating this constraint, the Public Health Service (PHS) in October 1988 began a two-year cooperative agreement with the American Institute of Nutrition to develop a set of nutritional status indicators applicable for field settings and as part of DHHS programs. The American Institute of Nutrition is the principal professional organization of nutrition research scientists in the United States, and has assisted Federal agencies to address nutrition-related questions and demonstrated a continuing interest in survey methods and analysis of data obtained by surveillance systems. We look forward to this set of indicators and to their testing and incorporation at appropriate times in the revision of ongoing monitoring activities and the initiation of new ones.

Management and Coordination of Nutrition Monitoring Activities

As described earlier, DHHS' nutrition monitoring activities serve a variety of purposes, with each activity meeting an agency-specific objective as well as providing information needed by a broader audience. Thus, coordination of activities to ensure optimal relevance is critical. Nutrition monitoring programs in DHHS, though decentralized, are linked and coordinated through interagency mechanisms, at the policy level by the DHHS Nutrition Policy Board. Participation of each of the PHS agencies in the planning for NHANES III is one example of the depth of interagency collaboration within DHHS.

The government-wide Interagency Committee on Nutrition Monitoring (ICNM) is the mechanism for coordination and long-range planning across the government departments with nutrition monitoring activities. The ICNM has the specific mandate to increase the overall effectiveness and productivity of nutrition monitoring efforts, by working to achieve goals of the NNMS as stated in the ten-year "Operational Plan for a National Nutrition Monitoring System," submitted to Congress in 1987. The three primary goals are (1) greater coordination among components of the National Nutrition Monitoring System, (2) improved information dissemination and exchange, and (3) improved research base for nutrition monitoring. The committee has begun to address its task through three working groups: survey complementarity, food composition data base, and information dissemination and exchange (including Federal and State relations), each focusing on a specific goal of the Operational Plan. It also works closely with the Interagency Committee on Human Nutrition Research, the government-wide committee responsible for coordination of Federal nutrition research efforts.

Over the last several years in response to the interest of both the Congress and our own nutrition researchers, we have made concerted efforts to broaden collaboration and coordination between DHHS and USDA--particularly between DHHS' National Center for Health Statistics and USDA's Human Nutrition Information Service (HNIS), managers of the two primary nutrition survey programs. NCHS and HNIS interaction includes: regular meetings to address technical issues, agreement to base the surveys of both agencies on the USDA Nutrient Data Bank, agreement to use the same age groups when reporting data, and dealing with a range of comparability issues.

On a broader scale, DHHS and USDA jointly sponsored a contract with the Life Sciences Research Office of the Federation of American Societies for Experimental Biology for a scientific evaluation of nutrition monitoring data that has lead to the second report on the nutritional and dietary status of the U.S. population, now in press and to be issued in October. This project was managed by a joint steering committee with representatives of all major nutrition monitoring data generators and users in both departments.

We have devoted a great deal of effort to establish mechanisms to improve coordination of the National Nutrition Monitoring System, and have now moved to address specific substantive issues. Many of the steps proposed in HR 677[*] and HR 1608 have been taken, and other improvements will be pursued in the future.

Coordination of Dietary Guidance Information

DHHS has a longstanding commitment, which it takes very seriously, to provide scientifically accurate, consistent dietary guidance to the population about health promotion and disease prevention using the principles embodied by the Dietary Guidelines for Americans. The Department was a partner in the preparation of the first Dietary Guidelines for Americans issued in 1980, its 1985 revision, and in work currently underway to prepare a 1990 edition. As is the case for nutrition monitoring, dietary guidance materials produced by DHHS agencies meet an agency-specific (and often disease-specific) mandate and serve a broader educational purpose as well. Thus, coordination of activities to insure consistency of messages is critical. Within the past several years, DHHS and USDA have worked hard to insure that dietary guidance information and publications are coordinated both within each Department and between the Departments. Current procedures are described in the following paragraphs.

Intra-Department Coordination: Dietary guidance coordination within DHHS is the responsibility of the DHHS Nutrition Policy Board Subcommittee on Dietary Guidance, whose membership includes representatives from DHHS agencies that produce dietary guidance information,. e.g., NIH, FDA, CDC, as well as a liaison representative from USDA. The Subcommittee is chaired by the DHHS Deputy Assistant Secretary for Health (Disease Prevention and

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[*] HR 677 and its Senate companion S 253 are identical to S. 1081, legislative pocket vetoed by President Reagan November 8, 1988.

Health Promotion) and Chairman of the DHHS Nutrition Policy Board. It was established in 1987 with the specific mandate to:

- coordinate DHHS agency activities that offer dietary guidance information targeted to the healthy American population,
- ensure the consistency of such activities, when appropriate, with the principles established in the Dietary Guidelines for Americans,
- encourage development of coordinated DHHS positions on dietary guidance,
- increase levels of cooperation and coordination between DHHS and USDA in order to facilitate consistency in dietary guidance from Federal sources,
- and exchange information on ways to improve the effectiveness of dietary guidance publications (Subcommittee on Dietary Guidance, Mandate and Procedures).

Each DHHS agency has its own procedures for review of its dietary guidance materials. Those proposed materials that depart substantively from the Dietary Guidelines for Americans must be submitted to the Subcommittee for a priori review.

The USDA has a corresponding working group, the Dietary Guidance Working Group, that reviews all proposed dietary guidance materials for the public for consistency with the Dietary Guidelines for Americans. A DHHS liaison participates in that Working Group's deliberations.

Inter-Department Review: Cross-representation structured into the operation of the DHHS Nutrition Policy Board Subcommittee on Dietary Guidance and into its counterpart at USDA, the USDA Dietary Guidance Working Group, constitute the principal mechanism for coordination between the Departments. In addition, the USDA/DHHS Nutrition Education Committee for Maternal and Child Nutrition publications promotes joint efforts between USDA and DHHS on educational materials related to maternal and child nutrition. The chairs of this committee sit on the Subcommittee on Dietary Guidance or the USDA Dietary Guidance Working Group.

In summary, we are proud of our accomplishments in promoting excellence in our nutrition monitoring and dietary guidance activities, and we look forward pursuing these efforts even more intensely in the future. Mr. Chairman, I appreciate your interest and that of your Committee in this area, and I thank you for the opportunity to speak with you today.

In this regard, let me note this Administration's continued opposition to HR 677, a bill that is identical to one vetoed by President Reagan on November 8, 1988. However, the Administration would not oppose HR 1608 if certain modifications are accomplished, most importantly the removal of the bill's single Secretary veto provision concerning issuance of dietary guidance.

[illegible]CHER, GEORGIA
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[illegible]E ESPY, MISSISSIPPI
[illegible]LL SARPALIUS, TEXAS
E (KIKA) DE LA GARZA, TEXAS,
EX OFFICIO MEMBER

JULIA PARADIS,
STAFF DIRECTOR

U.S. House of Representatives
Committee on Agriculture
Subcommittee on Domestic Marketing,
Consumer Relations, and Nutrition
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BILL EMERSON, MISSOURI,
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LYNN P. GALLAGHER,
MINORITY CONSULTANT

October 17, 1989

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Mr. J. Michael McGinnis
Deputy Assistant Secretary for Health
Office of Disease Prevention & Health Promotion
Public Health Service
U.S. Department of Health and Human Services
Room 2132
330 C Street, S.W.
Washington, D.C. 20201

Dear Mr. McGinnis:

I would like to take this opportunity to thank you for your testimony on the issue of nutrition monitoring at our joint subcommittee hearing on September 21, 1989. I appreciate your continued interest in this important matter.

On behalf of the subcommittees participating in the joint hearing, I am enclosing written questions that have been submitted to me by various subcommittee Members. I would ask that you take no more than three weeks to answer these questions so that your responses might be made a part of the record. If you have any questions or concerns about these questions, please do not hesitate to contact Ms. Julie Paradis, Staff Director of the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition (202-225-1867) or Dr. Grace Ostenso, Staff Director of the Subcommittee on Science, Research and Technology (202-225-1060).

Thank you for your efforts in helping us to establish a strong record on the need for nutrition monitoring legislation.

With every good wish, I am

Sincerely,

Charles Hatcher
Chairman

Enclosures

NATIONAL NUTRITION MONITORING HEARING

September 21, 1989

FOLLOW-UP QUESTIONS FOR:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

1. *The Federal government has been working on a National Nutrition Monitoring System since 1977. It is now 1989. What accomplishments have been made and where can improvements be made?*

2. *Do you feel that it would be appropriate for an agency--such as the Bureau of the Census--to conduct a baseline study of the nutritional status of Americans? Or do you feel that we know the nutritional status of Americans right now?*

3. *Let's say that we know the nutritional status of Americans right now. What do we do with that information? Is that where the Dietary Guidelines for Americans come in?*

4. *Does DHHS have the opportunity to review all of USDA's dietary guidance materials prior to issuance? Does USDA have the opportunity to review all of DHHS's dietary guidance materials prior to issuance?*

5. *Please provide a list of the dietary guidance materials that have been reviewed by the appropriate committees in DHHS and USDA.*

6. *What has been done to implement the recommendations from the July 1986 report Nutrition Monitoring in the United States' issued by the Joint Nutrition Monitoring Evaluation Committee and the recommendations from the report National Survey Data on Food Consumption--Uses and Recommendations?*

7. *How frequently has the Interagency Committee for Nutrition Monitoring meet since it was established? What specific recommendations or outcomes have resulted from each of the Interagency Committee's work groups -- survey complementary; information dissemination and exchange; and food composition data?*

8. *The summary recommendations of the July, 1989 report on Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring completed for USDA and DHHS by the Federation of American Societies for Experimental Biology (FASEB) indicates, "Both USDA and DHHS have developed plans for survey activities, to a large extent, through 1995 --"*

   Please describe those plans indicating: (1) the recommendations incorporated from the 1988 Progress Report from the Joint Nutrition Monitoring Evaluation Committee; (2) the comparability between USDA and DHHS surveys regarding nutrient composition data bases; (3) common sociodemographic descriptions; and (4) the capability for linking survey results.

9. *The report by FASEB also indicates some of the nutrition monitoring data could not be used or interpreted by the Panel because they were "reluctant to use some of the data in which response was less than 50 percent."*

   a. *What was the response rate of the 1976-1980 and 1988 DHHS National Health and Nutrition Examination Survey?*

   b. *Do you analyze nutrition monitoring data even if the response rate is less than 50 percent? Please Explain.*

10. *Who is the nutrition coordinator across all agencies in DHHS?*

11. *The National Institutes of Health's Fiscal Year 1987 report on Program in Biomedical and Behavioral Nutrition Research and Training (page 84) indicates "The NHLBI supports a standardized system for collecting, coding, processing, and analyzing dietary information. ---The coding manual and nutrient database are continually updated by a staff of nutritionists and data specialists to reflect changes in the marketplace." Why is a nutrient database other than the USDA Nutrient Data Bank which NHLBI supports required? Is the NHLBI nutrient database or the USDA nutrient database used to calculate dietary intake data for the National Health and Nutrition Examination Survey? And the Nationwide Food Consumption Survey?*

12. *What is DHHS's assessment of the September 1987 Atlantic Monthly article "The Cholesterol Myth"? Was the decision to conduct the National Cholesterol Education Program based on nutritional status data from either the National Health and Nutrition Examination Survey or the Nationwide Food Consumption Survey? Why or why not?*

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Office of the Assistant Secretary
for Health
Washington DC 20201

The Honorable Charles Hatcher
Chairman, Subcommittee on
Domestic Marketing, Consumer Relations,
and Nutrition
Committee on Agriculture
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Hatcher:

Enclosed are the responses to the written questions requested as follow-up to the September 21, 1989, hearing on nutrition monitoring. We appreciate your interest in issues related to monitoring the dietary and nutritional status of Americans' nutrition and health, and want to reaffirm the Department of Health and Human Services' commitment to strong, sustained, and coordinated efforts throughout the range of our nutrition monitoring activities.

Sincerely,

J. M. McGinnis, M.D.
Deputy Assistant Secretary for Health
Director, Office of Disease Prevention
and Health Promotion

Enclosure

NATIONAL NUTRITION MONITORING HEARING, SEPTEMBER 21, 1989; FOLLOW-UP QUESTIONS

1. **The Federal government has been working on a National Nutrition Monitoring System since 1977. It is now 1989. What accomplishments have been made and where can improvements be made?**

In the twelve years since the Food and Agriculture Act of 1977 required the preparation of a plan for a National Nutrition Monitoring System, there have been some significant achievements. Notably:

- Two reports have reviewed information available from the NNMS and reported to Congress on the nutritional status of Americans.

- An Interagency Committee on Nutrition Monitoring was established in June 1988 to coordinate the activities of Federal Departments engaged in nutrition surveys and surveillance activities. As its first activity, the Committee published a Directory of Federal Nutrition Monitoring Activities.

- An increase in comparability of survey information has been achieved through addition of some comparable sociodemographic questions to survey questionnaires, the adoption of the USDA food composition data base by the third National Health and Nutrition Examination Survey, and reporting of survey results using identical sociodemographic categories.

- Substantial improvements were made in the design and methodology being used in the third National Health and Nutrition Examination Survey. We have designed the survey to improve our ability to monitor the health and nutritional status of minority groups including Blacks and Mexican Americans, and groups at high nutritional risk including children under 5 years of age and adults 50 years of age and older. We have automated many aspects of the survey to improve the timeliness of our data release. The content of the survey was designed to focus on two aspects of current public health concerns: undernutrition and overnutrition. To better assess the contribution of hunger to the prevalence of undernutrition, new questionnaires were developed and tested to assess individuals' access to sufficient food.

- Innovative methods have been developed to determine how widespread malnutrition is among infants and are being tested in four State health departments under a Centers for Disease Control initiative called Surveillance of Severe Pediatric Undernutrition.

- Assistance is given to States to determine the prevalence of nutrition risk factors for chronic diseases through the Behavioral Risk Factor Surveillance System. Thirty-six States now participate in this system which began in 1984.

- The 1981 Implementation Plan was updated as The Operational Plan for a National Nutrition Monitoring System. Accomplishments through 1986 are described in Part II of the Plan (pages 7-18 of Attachment 1).

- Special surveys have been conducted to fill in the gaps in our information about health and nutritional status. The Hispanic Health and Nutrition Examination Survey was conducted in 1982-84 and for the first time, detailed information on the health and nutritional status of Mexican Americans, Cubans, and Puerto Ricans is available. The National Health Interview Survey conducted three special supplements --Health Promotion and Disease Prevention (1985), Vitamin and Mineral Supplement Use (1986), and Cancer Risk Factors (1987) -- all of which provide substantial new information about nutrition-related topics. The NHANES I Epidemiologic Followup Study is proving to be a valuable source of data for the study of nutritional status, dietary habits, and later mortality and morbidity experience.

While there has been a lot of activity and some real progress as noted above, there is need to make improvements in several areas.

- Development of a common 24-hour recall method for use in nutrition surveys would be a desirable and achievable goal. Coverage is poor for some subgroups in the population, particularly the low-income and Native Americans. Work is underway to define a core set of indicators to be used in surveys of low-income groups, and the Indian Health Service is planning special surveys in the Navajo Nation and in Alaska.

- We need to work closely with States to develop their capacities for implementing nutrition surveys, and to use the information available from Federal surveys at the State and local levels.

Planned improvements are outlined in Part III of the Operational Plan (pages 22-27 of attachment 1). Three Subcommittees of the ICNM--food composition data bases, survey complementarity, and communication with users (including Federal and State relations) are currently working to further operationalize areas of needed improvement, and we would be pleased to share their recommendations with the Subcommittees.

2. **Do you feel that it would be appropriate for an agency--such as the Bureau of the Census--to conduct a baseline study of the nutritional status of Americans? Or do you feel that we know the nutritional status of Americans right now?**

We know quite a lot about the nutritional status of the American population, and that information is summarized in the reports on National Nutrition Monitoring in the United States: An Progress Report form the Joint Nutrition Monitoring Evaluation Committee (1986) and

Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring (1989). We therefore do not think that it is necessary or appropriate for the Census Bureau or another agency to conduct a baseline study of the nutritional status of Americans.

3. **Let's say that we know the nutritional status of Americans right now. What do we do with that information? Is that where the Dietary Guidelines for Americans come in?**

Information about nutritional status has a variety of uses, one of which is to provide an indication of nutrition-related diseases or conditions of particular public health concern, e.g, overweight or iron deficiency. Nutrition status information from NHANES also provides national reference data that can be used as benchmarks for smaller studies and in clinical practice. One of the best examples of this application is provided by the NCHS/CDC Growth Charts that are used to monitor the growth of children both here and abroad. The data from the NHANES are also vital to assessing the need for changes in fortification policies and other regulatory activities which assure the nutritional quality of the food supply. And the information is also used in epidemiologic research to study the relationships among diet, nutritional status, and disease. Finally, the information is useful for tracking progress toward achieving the National Health Objectives. (More specific examples are on pages 12-14 of the Operational Plan--Attachment 1).

Nutritional status information is useful to the Dietary Guidelines setting process in that it identifies key nutrition-related public health concerns that might be ameliorated through dietary modification. Some of the surveys provide insights into consumer knowledge, attitudes, and behavior which is also useful in crafting educational material to accompany the guidelines.

4. **(a) Does DHHS have the opportunity to review all of USDA's dietary guidance materials prior to issuance? (b) Does USDA have the opportunity to review all of DHHS' dietary guidance materials prior to issuance?**

(a) Yes, through the DHHS liaison representative on the USDA Dietary Guidance Working Group.

(b) Through its liaison representation on the DHHS Nutrition Policy Board Subcommittee on Dietary Guidance, USDA has the opportunity to review all DHHS dietary guidance materials that may not be consistent with the Dietary Guidelines. It also has the opportunity to request review of other materials.

5. **Please provide a list of the dietary guidance materials that have been reviewed by the appropriate committees in DHHS and USDA.**

As indicated in written testimony, each DHHS agency has its own procedures for review of its dietary guidance materials. Those proposed materials that depart substantively from the Dietary Guidelines for

Americans must be submitted to the Subcommittee for a priori review. Since its inception in 1987, no publications have fallen in that category.

At the agency level, USDA is routinely asked to review dietary guidance materials. The recent NIH publication, Eating for Life, is an example.

6. **What has been done to implement the recommendation from the July 1986 report Nutrition Monitoring in the United States issued by the Joint Nutrition Monitoring Evaluation Committee and the recommendations from the report National Survey Data on Food Consumption--Uses and Recommendations?**

Overall, recommendations from the JNMEC report and the National Research Council report are reflected in the key goals and implementation activities of the ten-year Operational Plan. Specific illustrative examples of recent accomplishments related to the JNMEC recommendations are provided in the following bullets.

- **Recommendation:** Establish a mechanism for learning more about the data needs of users, especially Federal agencies.

  In preparation for NHANES III, NCHS undertook a three-year planning process to design a survey to meet the information needs of the Federal agencies using the information. For the nutrition component of the survey this consisted of: letters to heads of agencies known to have used our data for program planning or regulatory decisions; advertisements in professional journals for recommendations on survey content; meetings with agencies to develop an understanding of their information needs and to describe the work plans and funding requirements for the survey; and development of written project proposals that underwent review by the NHANES III Survey Content Task Force, the Scientific Advisory Group convened by the NCHS Director, an Institutional Review Board, and the Office of Management and Budget.

  Formal agreements were developed with 14 agencies that provide funding for the survey as well as scientific and public policy expertise. The participating agencies form the NHANES III Research Consortium, an advisory group to the Director of the survey that insures each member agency's concerns are reflected in the survey objectives. The Consortium meets twice a year to review progress on the survey and will participate in the development and release of data from the survey.

- **Recommendation:** Sponsor periodic conferences related to survey design and data analysis.

  Since 1986, NCHS has conducted about a dozen different workshops and conferences related to survey design and data analysis (Listed in Attachment 2).

- **Recommendation:** Increase the availability of nutrition information from Federal surveys.

  NCHS asks users of our survey data to include the survey name in the title or abstract of their publications to facilitate finding them when using computerized bibliographic searches. NCHS maintains a list of all publications using HANES data, and makes the listing available on request.

  In addition, there are concerted efforts to disseminate information about surveys to professional journals. For example, regular submission to Public Health Report and the American Journal of Public Health. The broad dissemination of both the nutrition monitoring reports to Congress and the directory of nutrition monitoring activities, including sessions at the 1989 annual meetings of the American Dietetic Association and the American Public Health Association are also examples of increased availability of information about the surveys. Additionally, the fall meeting of the American Institute of Nutrition will focus entirely on nutrition status assessment and monitoring, and will include an entire session on NHANES and a workshop on interpretation of USDA's dietary data.

- **Recommendation:** Establish a listing of data bases, including methods and techniques related to food, nutrition, and health.

  The report Nutrition Monitoring in the United States: Directory of Federal Nutrition Monitoring Activities is a comprehensive listing of Federally conducted surveys and surveillance activities that provides the information cited in this recommendation.

- **Recommendation:** Provide resources for policy-relevant analyses of existing data.

  The in-depth analyses presented in the report, Nutrition Monitoring in the United States: An Update on Nutrition Monitoring, are a recent example of policy-relevant analyses of existing data. Perhaps the most comprehensive use of nutrition monitoring information for policy purposes is the Surgeon General's Report on Nutrition and Health.

  One percent evaluation funds administered by Office of Health Planning and Evaluation for the Assistant Secretary for Health provide at least one mechanism for such analyses of survey data to address major program and policy information related to evaluation of program efforts.

o **Recommendation:** Provide adequate and uniform documentation of data files.

The documentation provided by NCHS surveys provides the information recommended. Copies of our tape documentation were shared with the Human Nutrition Information Service while in draft form so that they could review and comment.

o **Recommendation:** Improve comparability of data. Mechanisms should be developed through which information from different data systems can be integrated and results reported in a comparable manner.

Of the specific items recommended by the Committee:

--NHANES III uses the USDA food composition data base to estimate dietary intakes.

--Statistical reports from NHANES III and USDA surveys are formatted so that readers can make direct comparisons (e.g., common age groups, demographic characteristics).

--Data tape documentation has been improved so that researchers can use data from surveys from both Departments more easily.

--Some identical questions link NHANES III and NFCS (sociodemographic and dietary intake).

--The Hispanic HANES and the NHANES III collect the information necessary for linking to the National Death Index.

--Work is in progress to develop set of core indicators of nutritional status (through cooperative agreeement with the American Institute of Nutrition).

--NHANES III contains questions on food security that have been tested and validated.

o **Recommendation:** Improve timely publication of data.

Of the specific Committee recommendations, the NHANES III is:

--automating data collection

--conducting quality control reviews within weeks of data collection

--planning analyses in advance of the survey

--using standardized tabular presentations with minimal text for statistical reports

- **Recommendation:** Continue and expand efforts to study the factors that influence food intake and nutritional status, especially among high-risk subgroups.

  A number of ongoing programs within DHHS attempt to measure and understand factors that shape dietary and nutritional status. These include CDC's pediatric, pregnancy and severe pediatric undernutrition surveillance systems; CDC's Health Interview Survey, Behavioral Risk Factor Surveillance Survey, and NHANES III; FDA's Diet and Health Survey; and NIH's cancer and cholesterol education programs. Research undertaken as part of NIH's educational programs also contribute to our understanding of factors affecting nutritional and dietary status in high-risk groups.

  The second report to Congress included two in-depth analyses in which determinants of food intakes and nutritional status, especially of high risk groups, were to be one of foci.

- **Recommendation:** Improve coverage of minority and low-income populations in activities of the National Nutrition Monitoring System.

  Several improvements have been made in our ability to monitor the health and nutritional status of minority and low-income populations. These include:

  --The Hispanic Health and Nutrition Examination Survey

  --Oversampling of Blacks, Mexican Americans, the young and the old in NHANES III

  --Surveillance of Severe Pediatric Undernutrition

  In addition, this recommendation provided the impetus for an evaluation of DHHS efforts to measure and track the nutritional status of low income populations.

  Work is also underway to develop a set of core indicators of nutritional status for low income populations.

- **Recommendation:** Evaluate the feasibility of developing indicators for monitoring changes in food consumption and nutritional status.

  No progress, however, the core indicators under development should contribute.

- **Recommendation:** Increase research to improve methods for assessing dietary intake and nutritional status.

  As the major agency in DHHS that supports research in biomedical and behavioral sciences relevant to nutritional assessment, the

NIH funds nutrition monitoring and surveillance research in three major areas. Food Consumption Surveys; Studies and Dietary Practices, Food Consumption Patterns and their Determinants; and Nutritional Status. From 1986 to 1988, NIH funding in each of these research areas has increased (see chart below). In addition, NIH, in collaboration with other agencies, funds studies that include the analysis of the nutritional content of food (such as fiber, carotenoid, and vitamin A) and research on mutagens produced from the cooking of foods.

Since the 1986 Report Nutrition Monitoring in the United States, the NIH has encouraged the application of meritorious research in nutrition monitoring research throughout all of it institutes, centers and divisions. Some examples of NIH's efforts to solicit research in this area include the following announcements to the nutrition research community.

- The Modification of Eating Behavior in the Community
- Physiochemical Effects of Dietary Fiber in Humans
- Behavioral Aspects of Nutrition
- Biochemical Bases of Nutrient Function
- The Relationship Between Blood and Tissue Micronutrient Levels in Humans
- Dietary Surveys and Food Consumption Data
- Effect of Environmental Agents on the Endocrine System

The NIH also has been active in funding related research on health issues of minority and high risk populations. A few examples include research on obesity in black adolescent women; cardiovascular disease in American Indians; the study of black pregnant women and their infants; Stroke-Belt initiative studying hypertension in the Southeastern United States, especially among blacks; and an epidemiologic survey designed to elucidate factors other than obesity that contribute to diabetes and cardiovascular risk among Mexican Americans.

Expenditures by the NIH for Nutrition Research by Area
FY 1986-88
(dollars in thousands)

Year	Nutrition Research	Food Consump. Surveys	Dietary Practices Food Consumption	Nutritional Status	Total
1986	221,978	1,624	27,430	27,743	51,251
1987	260,611	1,496	27,454	26,924	50,534
1988	276,195	5,956	29,982	28,493	58,053*

*Excludes duplicate classification

- **Recommendation:** Provide adequate resources for the National Monitoring System to implement these recommendations and for the Committee which is charged with interpreting the data collected by this system and also with assessing the need for improvements in the system.

  - NHANES III sample size expanded over past surveys, but not to the level initially planned.

  - funding of second report through tap on several agencies

  This recommendation was reflected in the process and the content for the second report to Congress, including a larger expert panel.

- **Recommendation:** Identify potential sources of complementary data for the National Nutrition Monitoring System.

  Interagency Committee on Nutrition Monitoring undertook this as its first task, and summarized the complementary sources of data in its report Nutrition Monitoring in the United States: The Directory of Federal Nutrition Monitoring Activities.

  Representatives from potential source of complementary data, e.g., Bureau of Labor Statistics, Bureau of the Census, USDA Food and Nutrition Service, are included as members of the Interagency Committee on Nutrition Monitoring.

7. **How frequently has the Interagency Committee on Nutrition Monitoring met since it was established? What specific recommendations or outcome have resulted from each of the Interagency committee's work groups--survey complementarity; information dissemination and exchange; and food composition data?**

   The Interagency Committee for Nutrition Monitoring has met five times since its inception in July 1988. The Committee's first task was to develop an inventory of surveys and surveillance activities that provide nutrition-related information and to make it available through a publication, Nutrition Monitoring in the United States: The Directory of Federal Nutrition Monitoring Activities. The Subcommittees have begun discussion among themselves and with the parent committee to identify issues to work on and to develop plans on how they will proceeds. It is too early to comment on specific recommendations or outcomes from the working groups.

8. **The summary recommendations of the July 1989 report on Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring completed for USDA and DHHS by the Federation of American Societies for Experimental Biology (FASEB) indicates, "Both USDA and DHHS have developed plans for survey activities, to a large extent, through 1995--"**

Please describe those plans indicating (1) the recommendations incorporated from the 1988 Progress Report from the Joint Nutrition Monitoring Evaluation Committee; (2) the comparability between USDA and DHHS surveys regarding nutrient composition data bases; (3) common sociodemographic descriptions; and (4) the capability for linking survey results.

(1) As indicated in response to question 6, many of the recommendations from the 1986 Progress Report from the Joint Nutrition Monitoring Evaluation Committee were taken into account in the plans for the third National Health and Nutrition Examination Survey.

(2) A working group was established to develop common sociodemographic questions to be used in NHANES III and NFCS 1987. The group recommended 38 questions which were incorporated into NHANES III pilot test questionnaires. Some were changed during the clearance process. About half of the original set of questions remain in a form in which results can be directly compared.

(3) Currently the only capability for "linking survey results" are to compare the data after the surveys are completed as described in (2) above. No mechanisms exist for directly linking or combining the samples.

9. **The report by FASEB also indicates some of the nutrition monitoring data could not be used or interpreted by the Panel because they were "reluctant to use some of the data in which response was less than 50 percent."**

a. **What was the response rate of the 1976-1980 and 1988 DHHS National Health and Nutrition Examination Survey?**

(a) Response rates for the second National Health and Nutrition Examination Survey were 91% for the home interview and 73% for the physical examination. So far in the NHANES III after one year of data collection, the interview response rate is 88% and the physical examination response rate is 78%.

b. **Do you analyze nutrition monitoring data even if the response rate is less than 50 percent? Please Explain.**

(b) On occasions, some items of the physical examination have had a low response rate. In past surveys these have included an oral glucose tolerance test and a gall bladder ultrasound examination. Response rates are low for these specific procedures because people have to fast 10 to 16 hours. Before using the data, we have conducted detailed analyses to determine if there is any bias in the sample of people who completed the tests as compared to those who did not. Only after we have satisfied ourselves that there is no apparent bias in the health characteristics of the people who completed the exam as compared to those who were selected but did not complete it have we analyzed the data. Results of the nonresponse bias analyses are included in the publications that result from the analyses.

10. **Who is the nutrition coordinator across all agencies in DHHS?**

The DHHS Nutrition Policy Board (NPB) is the formal mechanism within DHHS for the coordination of nutrition policy formulation. The NPB is chaired by the Deputy Assistant Secretary for Health (Disease Prevention and Health Promotion) and comprises senior level administrators from all the Public Health Service Agencies (Alcohol, Drug Abuse and Mental Health Administration; Centers for Disease Control; Food and Drug Administration; Health Resources and Services Administration; Indian Health Service; National Institutes of Health) and other DHHS agencies with nutrition-related interests (Family Support Administration, Office of Human Development Services, and Administration on Aging). The Board also has a Staff Working Group comprised of technical staff from the agencies. The NPB was responsible for general editorial oversight for The Surgeon General's Report on Nutrition and Health.

As Chair of the Policy Board and on behalf of the Assistant Secretary for Health, the Deputy Assistant Secretary for Health (Disease Prevention and Health Promotion) monitors nutrition coordination on a day-to-day basis.

11. **The National Institutes of Health's Fiscal Year 1987 report on Program in Biomedical and Behavioral Nutrition Research and Training (page 84) indicates "The NHLBI supports a standardized system for collecting, coding, processing, and analyzing dietary information. ---The coding manual and nutrient database are continually updated by a staff of nutritionists and data specialists to reflect changes in the marketplace." What is a nutrient database other than the USDA Nutrient Data Bank which NHLBI supports required? Is the NHLBI nutrient database or the USDA nutrient database used to calculate dietary intake data from the National Health and Nutrition Examination Survey? And the Nationwide Food Consumption Survey?**

Past and current National Health and Nutrition Examination Surveys have used the USDA nutrient data bases as the primary source of food composition information and augmented that information with data from private industry. The survey currently under way, the third National Health and Nutrition Examination Survey (NHANES III), has the capability to analyze dietary recalls using USDA food composition data or the more detailed and extensive data available from the University of Minnesota. The NHANES III collects 24-hour dietary recall information through a computerized, interactive interview program developed by the Nutrition Coordinating Center of the University of Minnesota. This program collects far more detailed information about brand name food products, ingredients, cooking methods, and the use of fat and sodium in food preparation than is possible with the USDA food code book. The USDA data base is not specific enough for fat and sodium composition of food to be used for health-related analyses; therefore we have maintained the flexibility to code to either data base. For comparative analyses with USDA surveys, we will be able to use the USDA data base because our more detailed information has been mapped to USDA food codes and subsequently to the USDA nutrient data base. For health-related analyses where more extensive information on fatty acids and sodium composition of foods in needed, we will be able to use the Minnesota data base.

The National Heart, Lung, and Blood Institute (NHLBI) has supported for almost 15 years, through interagency agreements, the USDA's Nutrient Data Research Group and Nutrient Composition laboratory to expedite acquisition of data for nutrients of importance in understanding the role of diet in cardiovascular disease.

The NHLBI also supports an investigator-initiated grant titled Nutrient Coordinating Center (NCC) at the University of Minnesota. The primary source of nutrient data for the Minnesota NCC is USDA. However, biomedical research requires a data base with greater specificity, currency and completeness than can be gotten solely from USDA. For example, with the grant at the University of Minnesota, brand-specific manufacturer data are incorporated and continually updated as formulations change. Missing data are interpolated until analytical data can be obtained. The magnitude of keeping track of packaged foods is illustrated by the fact that 8,000 new products were introduced into the market last year, equivalent to half an average supermarket shelf inventory. Only limited brand name data are available from USDA data tapes.

The computer software developed by the Minnesota NCC under a grant from the National Cancer Institute for an interactive computer-assisted assessment of nutrient intake is capable of being used with any nutrient data base.

12. **What is DHHS's assessment of the September 1989 Atlantic Monthly article "The Cholesterol Myth'? Was the decision to conduct the National Cholesterol Education Program based on nutritional status data from either the National Health and Nutrition Examination Survey or the Nationwide Food Consumption Survey? Why or why not?**

The DHHS's view of this article is reflected in the attached Dear Colleague letter by Claude Lenfant, M.D., Director of the National Heart, Lung, and Blood Institute (Attachment 3). In brief, the article reaches erroneous conclusions concerning the relationship between diet, blood cholesterol and heart disease.

The decision to launch the National Cholesterol Education Program (NCEP) in 1985 was made on the basis of research data showing that reduction of elevated blood cholesterol levels would reduce the risk of coronary heart disease, and on survey information showing that neither professionals nor the public had an adequate appreciation of the importance of lowering high blood cholesterol.

Nutritional status data from NHANES, food intake data from NHANES and USDA, and food composition data from USDA have played an important role in the development of the NCEP's messages concerning eating patterns to lower high blood cholesterol levels.

Attachment 1

OPERATIONAL PLAN FOR THE NATIONAL NUTRITION MONITORING SYSTEM

U.S. Department of Health and Human Services
Public Health Service

U.S. Department of Agriculture
Food and Consumer Services

August 1987

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ACRONYMS AND ABBREVIATIONS

The following list of acronyms and abbreviations is provided as a quick index of terms and Federal departments, agencies, and activities that are mentioned more than once in this report. Parenthetical acronyms and abbreviations identify the parent agency and department.

ASTPHND	Association of State and Territorial Public Health Nutrition Directors
BRFSS	Behavioral Risk Factor Surveillance System (CDC/DHHS)
CDC	Centers for Disease Control (DHHS)
CNRU	Clinical Nutrition Research Unit (NIH/DHHS)
CSFII	Continuing Survey of Food Intakes By Individuals (HNIS/USDA)
CSSS	Coordinated State Surveillance System (CDC/DHHS)
DHHS	Department of Health and Human Services
ERS	Economic Research Service (USDA)
ES	Extension Service (USDA)
FASEB	Federation of American Societies for Experimmental Biology
FDA	Food and Drug Administration (DHHS)
FLAPS	Food Labeling and Package Survey (FDA/DHHS)
FNS	Food and Nutrition Service (USDA)
FSIS	Food Safety and Inspection Service (USDA)
HHANES	Hispanic Health and Nutrition Examination Survey (NCHS/DHHS)
HNIS	Human Nutrition Information Service (USDA)
INFOODS	International Food Composition Data System
ICHNR	Interagency Committee on Human Nutrition Research
JNMEC	Joint Nutrition Monitoring Evaluation Committee (USDA/DHHS)
LSRO	Life Sciences Research Office (FASEB)
NCI	National Cancer Institute (NIH/DHHS)
NCL	Nutrient Composition Laboratory (ARS/USDA)
NDB	Nutrient Data Bank (HNIS/USDA)
NFCS	Nationwide Food Consumption Survey (HNIS/USDA)
NHLBI	National Heart, Lung, and Blood Institute (NIH/DHHS)
NIA	National Institute on Aging (NIH/DHHS)
NICHD	National Institute of Child Health and Human Development (NIH/DHHS)
NIH	National Institutes of Health (DHHS)
NIDDK	National Institute of Diabetes and Digestive and Kidney Diseases (NIH/DHHS)
NHANES	National Health and Nutrition Examination Survey (NCHS/DHHS)
NHIS	National Health Interview Survey (NCHS/DHHS)
NNMS	National Nutrition Monitoring System
OASFCS	Office of the Assistant Secretary for Food and Consumer Services (USDA)
OASH	Office of the Assistant Secretary for Health (DHHS)
PHS	Public Health Service (DHHS)
TDS	Total Diet Study (FDA/DHHS)
USDA	United States Department of Agriculture

PREFACE

The National Nutrition Monitoring System (NNMS) is a complex assortment of interconnected activities which provide regular information about the contribution that diet and nutritional status make to the health of the American people and about the factors affecting diet and nutritional status.[1] These activities fall into the five categories of health and nutritional status measurements, food consumption measurements, food composition measurements, dietary knowledge and attitude assessment, and food supply determinations.

The National Health and Nutrition Examination Survey (NHANES) and the Nationwide Food Consumption Survey (NFCS) form the core of the system. NHANES is conducted periodically by the National Center for Health Statistics (NCHS) of the Department of Health and Human Services (DHHS). It consists of a series of surveys of probability samples of the U.S. population. The surveys include health histories, medical examinations, laboratory measurements, and dietary interviews. Analyses of the resulting data provide assessments of the health and nutritional status of the U.S. population. Two national surveys have been completed--NHANES I (1971-1974) and NHANES II (1976-1980). A third, NHANES III (1988-1994), is scheduled to begin in September 1988. A survey of Hispanic Americans, the Hispanic Health and Nutrition Survey (HHANES), was completed in 1984.

NFCS, the responsibility of the Human Nutrition Information Service (HNIS) of the Department of Agriculture (USDA), has been conducted at roughly 10-year intervals since the mid-1930s. NFCS collects data on household food use and on food intake at home and away from home by individual household members. NFCS is based on a national probability sample of households. Data collected include the kinds, amounts, and costs of food used by households during a 7-day period and the food

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[1] Nutrition monitoring is defined as an on-going description of nutrition conditions in a population--with particular attention to subgroups defined in socioeconomic terms--for purposes of planning, analyzing effects of policies and programs, and predicting future trends (Mason *et al.*, 1984). Nutrition monitoring is characterized by regular data collection, by a focus on populations, and by linkages with the decision-making process. It also provides information about factors that affect diet and nutritional status in a population. NNMS data are used primarily for national nutrition planning; its large monitoring surveys are not fully adequate for evaluation of food assistance programs, although the surveys do collect information about program participation for use as variables in studies of determinants of nutritional and dietary status (DHHS/USDA, 1986). Issues of definition and purposes, and of the specific use of monitoring data for program evaluation are discussed further in Mason *et al.* (1984) and in *Nutrition Monitoring in the United States: A Progress Report from the Joint Nutrition Monitoring Evaluation Committee* (DHHS/USDA, 1986).

actually consumed by household members during a 3-day period. Analysis of survey data provide assessments of the adequacy of nutrient intakes of the U.S. population and population segments. The last in the series of national surveys was conducted in 1977-78 and the most recent began in April 1987. A smaller Continuing Survey of Food Intakes by Individuals (CSFII), initiated in 1985, provides information about dietary intakes between the larger decennial surveys.

USDA and DHHS, as well as other Federal agencies, carry out a variety of other monitoring activities that contribute to the understanding of the dietary and nutritional well-being of the population. For example, the USDA Human Nutrition Information Service and Economic Research Service (ERS) provide yearly estimates of the U.S. food supply and its nutrient content. HNIS also maintains the National Nutrient Data Bank. The DHHS Food and Drug Administration (FDA) determines levels of selected nutrients and contaminants in diets prepared from standard market baskets of foods in several regions of the country and supports quantitative assessments of vitamin and mineral supplement intake. Its Food Label and Package Survey (FLAPS) provides information on the nutritional quality of packaged foods through the examination of nutrition labels and through nutrient analysis of products bearing labels. FDA also conducts assessments of consumer knowledge, attitudes, and practices about diets. The Centers for Disease Control (CDC) of DHHS collects information on the health status of people in high-risk groups who use public health facilities in 34 states. These and related monitoring activities of the two Departments are described in appendix 1.

The NNMS maintains formal linkages with Federal nutrition policymakers through representation on the DHHS Nutrition Policy Board and the Subcommittee for Human Nutrition of USDA's Committee on Research and Education. It also maintains formal linkages with the Federal nutrition research community through the Interagency Committee on Human Nutrition Research.

The Agricultural Research Service (ARS) of USDA and the National Institutes of Health (NIH) of DHHS provide most of the research base underlying its efforts. ARS conducts basic research on human nutritional status assessment, requirements, and methods for determining the composition of foods. NIH supports the country's largest program in human nutrition research, including research on assessment of nutritional status, nutritional epidemiology, and clinical nutrition (DHHS/USDA, 1986). CDC, which conducts research on methods to assess nutritional status, and FDA, which conducts research on methods to measure nutrient and fiber content of foods, also support the monitoring activities' research base. Linkages with the nutrition policy arena and nutrition research community are illustrated in appendix 2.

Coordination among the major components of the monitoring system is the joint responsibility of the Office of the Assistant Secretary for Health (OASH), DHHS, and the Office of the Assistant Secretary for Food and Consumer Services (OASFCS), USDA. In the coordination of monitoring efforts, OASH-DHHS takes leadership responsibility for efforts to measure health and nutritional status, and OASFCS-USDA takes responsibility for food composition measurements and food supply determinations.

Responsibility for the other categories of activities--food consumption measurements and dietary knowledge and attitudes assessment--is shared by the two Departments. These assignments are based on primary data collection responsibilities as currently practiced.

This report is a revision of the *Joint Implementation Plan for a Comprehensive National Nutrition Monitoring System* that was submitted to Congress in 1981. Prepared by USDA and DHHS under the aegis of the Assistant Secretary for Food and Consumer Services, USDA, and the Assistant Secretary for Health, DHHS, the 1981 plan described national nutrition monitoring activities underway, and specified goals and implementation activities for a nutrition monitoring system. The goals were:

- Achievement of the best possible coordination of the two largest components of the system--the National Health and Nutrition Examination Survey and the Nationwide Food Consumption Survey, and

- Development of a reporting system to translate findings from the two surveys and other monitoring activities into periodic reports to Congress on the nutritional status of the American population.

This report, the *Joint Operational Plan for the National Nutrition Monitoring System*, extends the implementation plan into its next phase. It contains three chapters. Chapter I presents the goals for this operational phase: two expanded goals of the implementation plan and one new goal. Chapter II describes progress achieved during the system's implementation phase. Chapter III covers the activities that will be undertaken during the operational phase. A calendar of events is included at the end of Chapter III.

CHAPTER I

THE GOALS FOR THIS OPERATIONAL PHASE

The 1981 implementation plan set two goals--better coordination of the two core surveys and the development of a system for reporting on the dietary and nutritional status of the U.S. population. Substantial progress has been made in both areas, and these goals will continue to be emphasized as the system moves from an implementation phase into an operational phase.

The goals for this operational phase build on the goals of the 1981 plan and include a new goal to improve the research base for nutrition monitoring. The new elements of each goal respond to recommendations by Federal, State, and local policymakers and program managers, the Congress, and the scientific community to include a wider range of nutrition monitoring activities, improve the system's ability to measure the nutritional status of high-risk groups, improve the relevance of data for policy decisions, and improve information dissemination and exchange.

GOAL A: Achieve a Comprehensive System Through Coordination Among NNMS Components

This goal focuses on achieving the best possible coordination of the National Health and Nutrition Examination Survey (NHANES) and the Nationwide Food Consumption Survey (NFCS) and expanding coordination efforts to include other Federal surveys that contain nutrition monitoring components. Emphasis is given to the need for improved coverage of "at risk" populations (improved ability to identify and reach populations at high nutritional risk) and improved temporal coverage of the U.S. population (continuous monitoring).

A.1. Include All Appropriate Nutrition Monitoring Activities

The NFCS and NHANES will continue to comprise the foundation of the National Nutrition Monitoring System (NNMS). They will provide, on a regular basis, important data on the nutritional health of a national sample of the population and comprehensive information about U.S. food consumption patterns.

The long-term goal is to integrate existing Federal surveys and surveillance activities into a network of activities that provides a more complete picture of the nutritional health of the total population and special subgroups than could the component surveys alone. Surveys and other activities added to the existing system may target specific populations or types of data collection not now adequately covered, and thereby supplement the current NHANES-NFCS data base.

A.2. Improve Coverage of Major Population Groups at Risk

Monitoring the dietary and nutritional status of the U.S. population, especially of those groups likely to be at highest nutritional risk, is an important component of the Department of Agriculture's (USDA) and the Department of Health and Human Services' (DHHS) nutrition-related missions. USDA's Human Nutrition Information Service (HNIS), for example, recently completed a survey of low-income women and their children as part of its Continuing Survey of Food Intakes By Individuals (CSFII), and includes special samples of low-income populations in its decennial NFCS. DHHS's National Center for Health Statistics (NCHS) has oversampled low-income groups as well as physiologically high-risk groups in its national surveys and has recently completed a survey of the health and nutritional status of Hispanic Americans. The Coordinated State Surveillance System of the Centers for Disease Control continuously monitors key indicators of nutritional status in two vulnerable groups--pregnant women and young children.

Some groups considered to be at nutritional risk, e.g., the homeless and migrants, are not included in the existing surveys. Other groups, including some racial minority groups, are not sampled in large enough numbers to permit accurate estimates of their dietary and nutritional status. The elderly--a subpopulation that may have a higher proportion of individuals who are nutritionally at risk--requires special attention. While NFCS has covered those over the age of 75 years in special surveys and its basic surveys, NHANES has not done so until now.

In view of these considerations, assessing and improving, where necessary, the coverage of high-risk populations by the NNMS has been made an explicit focus of this plan. Attention will be directed to identifying high-risk groups and coverage gaps, implementing survey designs capable of making estimates for targeted groups, and, to the extent feasible within fiscal constraints, conducting special surveys of groups not covered in national surveys or existing surveillance systems.

A.3. Improve Temporal Coverage

This goal refers to the NNMS' ability to continuously monitor the diet and nutritional status of the U.S. population. During the 1970s, a national nutrition survey was in the field nearly every year--the first National Health and Nutrition Examination Survey (NHANES I) in 1971-1974, the second National Health and Nutrition Examination Survey (NHANES II) in 1976-1980, and the Nationwide Food Consumption Survey (NFCS) in 1977-1978. There was, therefore, nearly continuous temporal coverage of the dietary intake and nutritional status of the U.S. population.

This temporal coverage was lacking in the first half of the 1980s when no national surveys were conducted. Although the Hispanic Health and Nutrition Examination Survey was conducted in 1982-1984, it was a special survey of three ethnic groups and the samples were drawn from three areas of the country--Mexican Americans residing in five southwestern states, Cuban Americans residing in Miami, Florida, and Puerto Ricans residing in selected counties of New York, New Jersey, and Connecticut. In 1985 HNIS initiated its CSFII to provide dietary data prior to NFCS-87. The CSFII, conducted in 1985 and 1986, surveyed women 19-50 years of age and their children 1-5 years of age in the general population and in the low-income population. Men ages 19-50 years were also surveyed in 1985. Such continuous monitoring of food consumption is especially important because consumption responds to many short-term changes such as food prices and availability as well as changing consumer attitudes and preferences.

It is a goal of the NNMS to have at least one national survey in the field every year to improve the temporal coverage of the U.S. population.

A.4. Improve Comparability Among Surveys

Departmental efforts over the past five years have focused on improving the comparability of the health and nutrition surveys conducted by NCHS and the dietary surveys conducted by HNIS. Substantial progress has been made in identifying common descriptors for a number of sociodemographic and dietary intake variables, and the surveys now share a common nutrient data base. During the operational phase, the Departments will exert every effort to achieve and maintain comparability related to the designs of the surveys, will urge comparability among additional surveys, and will explore the development of core data sets as part of their long-term strategy.

GOAL B: Improve Information Dissemination and Exchange

This goal continues the Departments' commitment to preparation of comprehensive reports on the dietary and nutritional status of the U.S. population. New emphasis is given to continued timely reporting and interpretation of data, to development of comparable reports and tape documentation, to increasing the usefulness of the system for meeting the decision-making needs of policymakers and program managers, and to increasing information exchange between data users and generators.

B.1. Continue Reporting System to Congress

The 1981 implementation plan laid out a mechanism that would integrate into common reports the results of the monitoring system's component nutrition activities. Reports were to be issued every three years. The reporting function was implemented by an expert scientific panel--the DHHS-USDA Joint Nutrition Monitoring Evaluation Committee (JNMEC)--which drew primarily on data from NHANES and NFCS to develop a report on the dietary and nutritional status of the population. The first report, entitled Nutrition Monitoring in the United States: A Progress Report from the Joint Nutrition Monitoring Evaluation Committee, was issued in July 1986.

This reporting mechanism, implemented by an expert scientific group, will continue. The next report will be issued in 1989.

B.2. Continue Timely Reporting and Interpretation of Data

Concerted efforts over the past five years by both Departments have reduced the time required to process, analyze, and release reports and public use data tapes. The Departments will continue to give a high priority to timeliness of data analysis and reporting.

B.3. Develop Comparable Reports and Tape Documentation

The diversity of subject matter, the many possible uses of the data, and the range of expertise of the users are constraints to standardization of formats for data reports and tapes. The potential value of the data is so high, however, that each monitoring system organization should include information in its documents to help users see how the data may be complementary to other disseminated data. Thus, each agency of the NNMS that produces written and computer tape output will strive to ensure that its documentation is comprehensive and comparable with that of other releases.

B.4. Increase Policy Relevance

Data from surveys must not only be timely and usable (goals B.2. and B.3.), but must also be useful. Usefulness requires that the data be directly related to policy, program management, and research needs. NNMS activities provide information relevant to Federal agriculture and public health policies and programs. Toward this end, they describe, insofar as methodologies permit, the adequacy and safety of U.S. diets, the nutritional status of the population, and the factors that affect diet and nutritional status. Major population subgroups for which problems of undernutrition and overnutrition exist are identified. NNMS activities also monitor trends in dietary and nutritional status at the national level, which can be used to determine whether observed problems are being rectified. They do not, however, have the capacity to assess the effectiveness of individual programs.

Information from the NNMS may be used to make decisions about, for example, programs to provide food assistance, nutrition education, special health services, nutrition labeling, food fortification, and other regulatory issues. Information from monitoring system activities is also used by the nutrition research community, as it develops hypotheses to investigate the role of dietary and nutritional factors in disease causation and prevention.

The component agencies of the monitoring system will provide data and information outputs that are timely, usable, and useful. The NNMS during the implementation phase was directed toward uses at the Federal policy level and did not emphasize data needs at the State and local levels. In order for the monitoring system to be relevant beyond Federal policy and program issues, a continuous process must also exist that attempts to determine and meet the decision-making needs of persons in State and local government, academia, and the private sector. Thus, during this operational phase, increased efforts will be made to understand the data needs of States and localities and to help their policymakers to interpret data from national surveys to meet their particular decision-making needs.

B.5. Improve Information Exchange Between Data Users and Generators

Dynamic information exchange between data users and those who generate the data is an essential part of an effective monitoring system. Effective exchange requires mechanisms by which those responsible for policy and program planning can communicate their information requirements to those responsible for obtaining the data supporting the NNMS. The latter, the "data generators" should in turn give special attention to developing designs, collection methods, and processing procedures that are responsive to data users' needs. In addition, to foster full and appropriate use of NNMS data, the data generators should regularly inform data users about the survey designs and methodologies and their strengths and weaknesses.

Goals B.2 (timeliness), B.3. (data release), and especially B.4 (relevance to decision-maker needs) are closely interwoven with objectives and functions involved in accomplishing this goal. The focus here is on increased efforts specifically aimed at improving the exchange of information betweens persons and organizations that use the data from NNMS and those that generate it, as may be accomplished through education, communication, and technical services.

GOAL C: Improve the Research Base for Nutrition Monitoring

This goal highlights the widely-recognized need for strengthening the scientific base for nutrition monitoring. Research needed to support nutrition monitoring activities falls into two broad categories. The first is methodological research specific to the conduct of surveys and surveillance activities, for example, to develop the most appropriate dietary interview instrument to measure usual intake in large, cross-sectional surveys, or to determine the feasibility of a hospital-based surveillance system for severe pediatric malnutrition. A limited amount of research in this category is currently undertaken by the agencies responsible for NNMS activities.

The second category includes research conducted by the broader nutrition community for its own purposes which also has application to nutrition monitoring. This is exemplified in Human Nutrition Research: The Federal Five-Year Plan, prepared by the Interagency Committee on Human Nutrition Research (ICHNR, 1986), the coordinating body for Federal human nutrition research efforts. The research plan identifies five priority areas in addition to nutrition monitoring: nutrition requirements through the life cycle; nutrient content, bioavailability, and interactions; research on the role of nutrition in the etiology, prevention, and treatment of chronic diseases and conditions; energy regulation, obesity, and related eating disorders; and nutrition education. Each of these has components applicable to nutrition monitoring activities. For example, research on the nutrient content of foods (nutrient content, bioavailability, and interactions) can be applied to updating food composition data bases.

The USDA Comprehensive Plan for a National Food and Human Nutrition Research and Education Program (USDA, 1986) and the NIH Annual Report on Biomedical and Behavioral Research Programs, FY 1985 (NIH, 1986) illustrate that nutrition research applicable to the NNMS includes, but is not limited to, the formally designated category of nutrition monitoring research.

It is a goal and expectation of the NNMS to strengthen the research base for nutrition monitoring by identifying and elaborating the nutrition monitoring research needed to improve the conduct of its activities and interpretation of its data, and by urging (and initiating, to the extent feasible) research efforts that will improve the scientific basis for monitoring.

CHAPTER II

PROGRESS DURING THE IMPLEMENTATION PHASE--1981-1986

Progress has been made toward achieving the two goals laid out in the 1981 implementation plan: improve coordination of NHANES and NFCS, and develop and implement a reporting system. Since these are being retained as goals for the next phase (as Goals A.4 and B.1), and progress has already been made toward meeting the expanded goals, the specific accomplishments during the implementation phase are listed in reference to the new goals:

A. Achieve a comprehensive system through coordination among NNMS components
B. Improve information dissemination and exchange
C. Improve the research base for nutrition monitoring

GOAL A: Achieve a Comprehensive System Through Coordination Among NNMS Components

A.1. Include All Appropriate Nutrition Monitoring Activities

The 1981 implementation plan focused on coordination of the two surveys that contribute the central core of data, NHANES and NFCS. Accordingly, most attention during the implementation phase was directed toward these two surveys. Within the past year, increasing attention has been directed toward other Federal nutrition monitoring activities. Using the framework recommended by the Joint Nutrition Monitoring Evaluation Committee, DHHS and USDA undertook preparation of a directory of these activities.

A.2. Improve Coverage of Major Population Groups at Risk

- In response to expressed needs of researchers and others concerned with the health status and care of Hispanic people, NCHS designed and conducted a special survey, the Hispanic Health and Nutrition Examination Survey (HHANES or Hispanic HANES) from 1982 through 1984. Much of the data has been released (see Goal B.2., this chapter).

- In response to a Congressional mandate, HNIS assessed the nutritional content of diets of households in Puerto Rico.

- Measurement of the dietary intake of low-income populations in the U.S. has also received emphasis. For example, in the preparation for CSFII-85, HNIS conducted a pilot study to evaluate procedures for longitudinal surveys of low-income groups--Mexican-Americans, American Indians, blacks, whites, and elderly in urban and rural areas; CSFII-85 and

CSFII-86 included national samples of low-income households, and have reported results in reports and on public use data tapes.

- A mechanism to monitor the prevalence of common nutrition-related problems in high-risk populations of pregnant women, initiated by the Centers for Disease Control (CDC) in 1979, has been expanded. In 1986, 14 States, the District of Columbia, and Puerto Rico participated in the Pregnancy Nutrition Surveillance System, with records submitted on approximately 70,000 pregnancies.

- Thirty-four States, the District of Columbia, and Puerto Rico participated in the CDC-coordinated Pediatric Nutrition Surveillance System in 1986. The States submitted approximately 2 million records for analysis and achieved an average county/clinic coverage of approximately 78 percent. CDC also furnished data management expertise and/or software packages to assist 5 States in processing and analyzing their own data. Through presentations, seminars, and workshops on the nutrition surveillance system, over 1,800 health professionals were reached.

- In 1984 CDC initiated a State-based surveillance system using random digit dialing telephone survey methodology in 19 States and the District of Columbia. The system collects data from adult respondents to determine the prevalence of behavioral risk factors associated with premature death and disability. These include nutrition-related risk factors such as obesity, hypertension, excessive alcohol consumption, and lack of physical exercise. The Behavioral Risk Factor Surveillance System extended to more than 30 States in 1986, providing State-specific results that could be used for program planning and monitoring trends.

A.3. Improve Temporal Coverage

- Responding to the need for continuous monitoring of the population, both HNIS and NCHS redesigned the surveys planned to begin in the last half of the 1980s.

  * Temporal coverage was built into the design of NHANES III so that information on the nutritional status and health of the population will be provided for two time periods--1988-1991 and 1992-1994.

  * NFCS-87 provides information for each season on food consumption for households and individual household members.

  * The CSFII conducted in 1985 and 1986 is a means of continuously monitoring the dietary status of individuals in the general and low-income populations in the years between the decennial NFCS. CSFII's panel approach of 6 days data collected over a year was adopted after two large-scale methods studies were conducted to identify the most suitable data collection method and number of days to provide an estimate of "usual" intake. This approach has not been used before by HNIS.

- FDA recognizes the importance of continuous monitoring of the food supply. It's annual Total Diet Study (TDS) regularly monitors the levels of selected contaminants and nutritional elements in the U.S. food supply and estimates the intakes of these substances in representative diets of specific age-sex groups. The TDS was updated in 1982 to reflect the food consumption patterns indicated by NFCS-77 and NHANES II. FDA's Food Labeling and Package Survey (FLAPS) includes a biennial probability survey of retail packaged foods as well as an ongoing surveillance program for nutrition labeling.

- Annual estimates of the nutrient content of the U.S. food supply have been expanded to cover additional nutrients and other food components important to health.

A.4. Improve Comparability Among Surveys

- DHHS and USDA jointly sponsored a study by the National Research Council's Food and Nutrition Board of uses of data from national food consumption surveys. The study was intended to document the extent and diversity of priority data needs and to help the Departments plan future surveys that would be responsive to these needs. The report, National Survey Data on Food Consumption: Uses and Recommendations, was issued in 1984 (National Research Council, 1984). It recommended that the two core surveys, NFCS and NHANES, not be merged or replaced, and that a common methodologic core be developed to link them. Other short and longer-term actions were also recommended, for example, to redesign the surveys as continuous survey processes. The recommendations have been considered in the Departments' continuing efforts to improve the comparability of their surveys.

- A joint NCHS/HNIS Coordinating Committee meets quarterly to review and discuss plans for their respective surveys. The committee identified four categories where comparability and coordination could be increased: food composition data, comparability of sociodemographic variables to allow for linking or common analysis of the surveys, methodology for the 24-hour dietary recall, and sampling design.

    * Food Composition Data. NCHS and HNIS agreed to use the HNIS food coding system and nutrient data file in their surveys; NCHS used the HNIS food composition data in Hispanic HANES.

    * Sociodemographic Variables. A joint NCHS/HNIS task force reviewed definitions and wording of sociodemographic and related questions planned for inclusion in NFCS-87 and NHANES III, and when possible, recommended ways to make them uniform or able to be linked for comparability. Incorporation of the task force's suggested modifications would improve the comparability of the two surveys. However, changes in the instruments occurring during the final review and clearance processes may preclude full acceptance of the task force's proposals.

    * Methodology for 24-hour recall. The 24-hour recall method is used to obtain food intake information through personal interviews in

NHANES, NFCS, and CSFII. Efforts are being made to make similar such aspects of the methodology as the questions, the degree of probing, and measurement guides. Some methodological differences may persist, however, because the NHANES includes a complex medical examination component that requires sample persons to attend mobile examination centers for most of the data collection. These mobile examination centers and their staff move from location to location over several years. The NFCS, on the other hand, collects all data in the household, and uses a number of interviewers across the country in one year.

* Sampling Design. Both NHANES and NFCS use stratified area probability samples of households. However, resolution of a number of issues related to the sampling designs, for example, differences in degree of clustering and development of compatible sampling frames, remain unfulfilled objectives of DHHS and USDA. The Departments have made limited progress in these areas.

GOAL B: Improve Information Dissemination and Exchange

B.1. Continue Reporting System to Congress

- The 1981 implementation plan laid out an evaluation and reporting system that would integrate the results of the several NNMS component nutrition activities into common reports. According to the plan, a Joint Nutrition Monitoring Evaluation Committee (JNMEC) sponsored by the OASH-DHHS and the OASFCS-USDA was to develop reports on the nutritional status of the population that would be issued to Congress at three-year intervals.

- The JNMEC was established as a Federal advisory committee in 1983 under the joint chairmanship of the Assistant Secretary for Health, DHHS, and the Assistant Secretary for Food and Consumer Services, USDA. It's report, Nutrition Monitoring in the United States: A Progress Report from the Joint Nutrition Monitoring Evaluation Committee, was transmitted to Congress in July 1986.

B.2. Continue Timely Reporting and Interpretation of Data

Over the past five years the availability and accessibility of data from NCHS and HNIS have increased markedly, as the following examples illustrate.

- Whereas it took six years after survey completion to process NHANES I data, much of NHANES II data collection was processed within two years. Release of data from Hispanic HANES, conducted from 1982 through 1984, was begun within one year, and biochemical and anthropometric data on Hispanics from the Southwest were first presented in November 1985. The first data tapes from all three portions of the survey (Mexican-American, Cuban-American and Puerto Rican) were released in 1987. They included data on dietary practices, body measurements, food frequency, blood and urine assessments, physical examination results, drug use, and medical histories of children and adults.

- NCHS is pilot testing an interactive computerized system for obtaining information on individual food intakes using a 24-hour recall interview. The system will link to HNIS food codes and nutrient data. The system will be used in the NCHS mobile examination centers where the NHANES dietary data are collected, and should substantially reduce the time needed to process the dietary data.

- Reporting of results in published and machine-readable form from CSFII-85 demonstrates HNIS's improved capacity to process and release survey results in a timely manner. Data collection for the first day's intake of CSFII-85 was completed in June 1985, a report of food and nutrient intakes was published in November 1985, and documented public use data tapes were available a few weeks later. The CSFII-85 reports compare 1985 and 1977 (NFCS) information on food and nutrient intakes by women and men 19-50 years and children 1-5 years in the general population and present information about women and children in the low-income population. CSFII-86 reports present similar information for women and young children, including a comparison with intakes reported in CSFII-85.

- An automated system for assigning food codes to foods reported by individuals contributed to the timely processing of CSFII data. It will also be used to process data from individual intakes reported in NFCS-87.

- In addition, an interactive computerized system to assist an interviewer obtain information on household food use and socioeconomic characteristics has been developed and tested. It should reduce the time required to process the household food use data from NFCS-87.

- The CDC surveillance system is characterized by its timely reporting mechanisms. These include (1) monthly and quarterly tabulations and reports that are used by participating State and local clinics to assess and monitor nutritional problems and quality control efforts, (2) special annual analyses and tabulations prepared in collaboration with the States for use in program planning and resource allocation, and (3) an annual publication, Nutrition Surveillance, that presents nutrition-related data collected by State and local health departments in a variety of nutrition and health programs.

B.3. Develop Comparable Reports and Tape Documentation

- The diversity of subject matter, the many possible uses of data, and the range of expertise of users constrain standardization of data outputs. The staff of NCHS and HNIS have made headway in making output from NHANES and NFCS comparable. Some sociodemographic descriptors (e.g., age and race) have been made uniform, and thus more capable of being compared.

- A Standard Reference Nutrient Data Base--a computerized version of updated Agriculture Handbook Number 8 tables--has been issued annually since 1981 for use by researchers with computer facilities. The data base was used to create a special data base for calculating the nutrient content of diets reported in CSFII-85, CSFII-86, and Hispanic HANES; it will also be used in NFCS-87, future CSFIIs, and NHANES III.

B.4. Increase Policy Relevance

Information from the NNMS has been used in the policy arena for a variety of purposes, as summarized below.

Health Policy Development

- In response to minority health initiatives of DHHS, NCHS conducted the Hispanic HANES. Hispanic health researchers, especially, had expressed a need for data more relevant to their goals. Their concerns were incorporated into the design and conduct of the Hispanic HANES. NCHS maintains a continuing interactive mechanism with them to assure that tapes and other data outputs are structured in ways that serve these users best.

- In support of the Public Health Service's development of national measurable health objectives, which include nutrition as one of 15 priority areas, NCHS designed supplements to its 1985 Health Interview Survey (NHIS) to obtain data on disease prevention and health promotion. Data from other NNMS surveys and surveillance activities have also been used to track progress toward meeting the 1990 National Health Objectives (DHHS/PHS, 1986).

Food Assistance Programs

- Federal food assistance programs also rely on NNMS data as the following three examples illustrate.

  * Results from studies of the association of diet quality with participation in the Food Stamp Program and in the School Lunch and School Breakfast Programs were useful in policy decisions related to the food assistance program.

  * The association of diet quality with targeting of the Food Stamp Program was shown using CSFII data: households receiving food stamps were found to be clearly more "needy" than households eligible for but not receiving food stamps; despite their lower income, individuals from food stamp households fared as well or better nutritionally.

  * Food intake and price data from NFCS-77 formed the research basis for the 1983 revision of the Thrifty Food Plan--the legal standard for benefits in the Food Stamp Program. A computerized model that minimizes deviation from food consumption patterns of low-income households while meeting nutritional specifications at given costs is used to form the food plan.

Nutrition Education and Information Dissemination

- Dietary and biochemical data from NCHS and HNIS surveys have been useful to HNIS, the Food and Nutrition Service (FNS), Extension Service (ES), FDA, NIH, and others in planning nutrition education and information programs. For example, NFCS-77 data have been used to show how the nutritional content of diets is associated with food shopping and money management practices, meal patterns, food eaten away from home, use of convenience foods, and addition of iron and B-vitamins through enrichment and fortification of grain products. Problem nutrients identified through the surveys are also included as a focus of nutrition education programs.

- Quantitative dietary recommendations proposed by various organizations have been compared to dietary patterns reported by CSFII sample persons. These comparisons have identified food selection changes that would be necessary to achieve the proposed recommendation, thus providing an indicator of the practicality of a recommendation. Within segments of the population, the nutrient intake of those achieving a given recommendation can be compared with those who do not. Such information is important for the design of practical food selection guides and nutrition education strategies.

- Results of surveys conducted by NIH on health practices and beliefs of professionals and the public have been important to the development of nutrition education materials and information dissemination to the public on various nutrition topics such as heart disease, cancer, etc. For example, the Cholesterol Awareness Surveys and others related to hypertension have been instrumental to the development of nutrition education materials for the National Cholesterol Education Program and the National High Blood Pressure Education Program.

- Information from FDA's periodic surveys of public attitudes, knowledge, and practices are useful in formulating education efforts. These surveys also obtain support from NIH.

- Also useful for education efforts (and applicable to food safety) is FDA's regular national probability survey of consumers that measures intake of dietary supplements, and also identifies intake-related attitudes, knowledge, and lifestyle practices. The intake part of the survey was updated in 1986 as a part of NCHS's National Health Interview Survey (NHIS).

Food Production and Marketing

- CSFII results that identify consumer shifts in commodity selection have been useful to USDA and others in formulating food production and marketing policies. For example, the recent decline in meat consumption, especially in high-income households, has emphasized the need for meat producers and marketers, who customarily link demand with price, to develop and market meat products that are more acceptable to the consumer.

- Food supply estimates and food consumption and dietary status measures from NFCS and CSFII were used by the National Research Council's Board on Agriculture to identify targets for technological options for the production and marketing of animal products.

Food Safety and Regulation

- FDA is a major user of data from the NNMS to evaluate and implement nutrition policy relative to its regulatory functions in a variety of areas: nutrient fortification of the national food supply, nutrition and ingredient labeling, food and nutrient safety, and foods for special dietary use. A recent example of its activities in this area is the convening of expert panels, under an FDA contract, to evaluate the vitamin A, iron, zinc, and folate status of the U.S. population.

- Estimates of intake of various contaminants and nutritional elements obtained as part of the Total Diet Study have helped FDA monitor the safety of the U.S. food supply, and intervene accordingly with regulatory and educational efforts to safeguard the public's health.

- FDA's FLAPS, in conjunction with consumer attitude and awareness surveys, has permitted assessments of the value of nutrition labeling. This activity has also permitted early identification of new fortification practices by industry. As part of the same FLAPS survey, FDA has maintained a surveillance program for nutrition labeling that has enabled FDA to assure necessary levels of accuracy of label values and to identify segments of the industry which warrant encouragement.

- The Environmental Protection Agency's system for the assessment of dietary exposure to pesticides has used NFCS-77 data for four seasons as the basis for its food consumption assumptions. The system will be updated using NFCS-87 data.

B.5. Improve Information Exchange Between Data Users and Generators

The Departments recognize that users who are informed about the survey designs methodologies, and their strengths and weaknesses, are prerequisite to full application of NNMS data. Equally important is learning about data needs of users. As summarized below, the Departments undertook a variety of activities during the implementation phase to foster such information exchange.

- Through published articles, talks at professional meetings, conferences, special workshops, and personal contacts, staff at NCHS and HNIS have given guidance in the use of survey data for a wide variety of purposes and have attempted to determine priority needs of data users.

- HNIS and NCHS cosponsored a comprehensive review of uses of national survey data on food consumption that was conducted by a committee of the National Research Council's Food and Nutrition Board (National Research Council, 1984). The committee's report described a multiplicity of users in government, the academic community, and industry, and included recommendations for increasing the survey's responsiveness to users' needs. The report's findings and recommendations have been considered in planning for the surveys.

- In designing NFCS-87 and NHANES III, HNIS and NCHS, respectively, established formal mechanisms for determining data needs of professionals from scientific, business, agricultural, and health sectors.

- National Nutrient Data Bank Conferences have been held annually since 1976. Their purpose is to identify needs of nutrient data users, to provide recent information on food composition and sampling and analytical procedures to data users, and to demonstrate proper uses of the data for a variety of purposes.

- Through nine cooperative agreements with universities, HNIS in 1986 encouraged the use of CSFII data in investigator-initiated studies of determinants of dietary practices and nutritional content of diets. These cooperative studies have strengthened understanding of needs of data users and generators, while expanding the number of experienced data users and uses of the data.

- The NHANES Users Group has been meeting twice a year since 1981. The group, which is coordinated by FDA and NCHS, is open to any researcher using or planning to use NHANES data. There are about 120 members. The meetings allow researchers to informally exchange their ideas, problems, and results, and allow NCHS staff the opportunity to brief researchers about recent NCHS developments.

- Two national and two regional workshops for State public health and food program leaders, sponsored by the Association of State and Territorial Public Health Nutrition Directors (ASTPHND), were held between 1985 and 1987. Their purpose was to show how states can use NHANES and NFCS/CSFII data.

- To help specify its needs as a user of data on nutrient adequacy and toxicity, FDA contracted with the Life Sciences Research Office (LSRO) of the Federation of American Societies for Experimental Biology (FASEB) to convene an *ad hoc* expert panel to recommend assessments of nutritional status and health conditions for possible inclusion in NHANES III. The panel examined indicators of status and, when applicable, excess accumulation, for 21 selected nutrients and health conditions, and identified feasible methodologies for use in a large-scale, cross-sectional survey. A report of the recommendations was published in 1985.

GOAL C: Improve the Research Base for Nutrition Monitoring

A limited amount of methodological research in nutritional status assessment, food consumption measurement, and food composition measurement was undertaken during the implementation phase that specifically addressed monitoring needs, i.e., was of direct relevance to the conduct of surveys or surveillance activities. In addition, DHHS and USDA undertook a broad array of research activities that had components applicable to nutrition monitoring activities even though nutrition monitoring was not the initial reason for doing the research. Examples of research related to the specific categories of measurement of monitoring system activities are outlined in the following bullets.

Methods for Nutritional Status Assessment

- NIH and ARS have undertaken extensive research related to nutritional status assessment and nutritional requirements. For example, ARS's Human Nutrition Research Centers have provided information about nutrient requirements throughout the lifecycle that is basic to dietary standards development and to relating dietry intake to nutritional risk. NIH Clinical Nutrition Research Units (CNRU) and centers have contributed especially to understanding the effects of disease states on nutritional status. Nutritional status assessment has been studied in healthy and clinical populations as well as high-risk groups. Such studies have examined (1) biochemical, anthropometric, maturational, and functional indices of nutritional status, (2) micromethods employing the latest technology and the smallest amounts to measure nutrient concentrations in various tissues and plasma, and (3) methods that improve the accuracy of dietary intake data. These agencies, as well as FDA and CDC, are also working on developing assessment methods that may be applicable to large-scale surveys. For example, CDC has developed more specific and reliable methods for the analysis of vitamins A and E and serum iron using very small samples.

- Long-term prospective studies on specific high-risk populations are underway at NIH and at ARS's Human Nutrition Research Centers. For example, the ARS Human Nutrition Research Center on Aging at Tufts University conducted a nutritional assessment of noninstitutionalized and institutionalized elderly in the Boston Area. Insights about nutrition and the aging process have also been gained from the NIH National Institute on Aging's Gerontology Research Center in Baltimore. These studies, which are unique because of their long-term perspective, provide insights about potential vulnerable groups, indicators, and standards that are useful for the monitoring system's endeavors.

- Conferences have also been used to explore ways to make better use of research data generated and to further collaborative efforts and information exchange. The biennial conferences of federally-supported human nutrition research units and centers are illustrative. The most recent conference was held in February 1987, and focused on nutritional status assessment and dietary intake methodology. A summary report will be published.

Food Consumption Measurement

- Methodological research on dietary intake assessment sponsored by HNIS since the mid-1970s has been reported at professional meetings and will soon be published in a single report. The research has included (1) an evaluation of elements of reporting error in food and beverage intakes collected using NFCS-77 procedures, (2) a comparison of 24-hour dietary recalls collected from male volunteers and from knowledgeable members of each household with information from unobtrusive observers, (3) a comparison of dietary intake and anthropometric data collected in NHANES I and NFCS, and (4) an evaluation of the applicability of nine alternative dietary intake methods for assessing the dietary status of the population through longitudinal and periodic surveys. In the last category, the best methods found were evaluated for use with several low-income populations.

- To provide improved standards for evaluating nutrient levels of diets reported in NFCS and other dietary studies, HNIS sponsored a major study by a committee of the National Research Council's Food and Nutrition Board to determine risk of nutrient deficiency at given levels below the Recommended Dietary Allowances. The committee's report, Nutrient Adequacy: Assessment Using Food Consumption Surveys, proposed a probability approach to measure risk in the populations surveyed (National Research Council, 1985. With the possible exceptions of iron and protein, however, the data on nutrient requirements needed for its use are not yet available.

- The ARS Human Nutrition Research Center at Beltsville, Maryland with some support from NIH, has continued its work on development of automated analytic techniques for direct analyses of food and improved methods for collecting, recoding, and evaluating dietary data. NIH-supported clinical trials and epidemiological studies have provided the opportunity to develop, test, and refine methods for measuring nutrient intake in populations.

- In 1986 FDA contracted with LSRO/FASEB for a review by an expert panel of appropriate uses of dietary intake data. The final report, released in 1987, provides guidelines for dietary data analysis and interpretation.

Food Composition Measurement

- The USDA Nutrient Data Bank (NDB) continues to be expanded with nutrient data from a variety of sources including academia, industry, and agency-sponsored research. For example, a nutrient data base of 28 food components in over 4,500 foods reported in surveys conducted in 1984-1986 was developed by a new automated system for use in the CSFII and Hispanic HANES. It is also available to the public.

- Food consumption data from CSFII-85 were used to identify data gaps in the Nutrient Data Base for major food contributors of nutrients. A study to supply these missing nutrient values has been proposed.

- Revision of Agriculture Handbook No. 8, Composition of Foods... Raw, Process, Prepared, is proceeding by food groups. Of the 23 sections planned, 16 have been published and others are in process.

- Since 1974, NIH has supported food composition data acquisition and research on improved methodology through interagency agreements with the HNIS Nutrient Data Research Group (which maintains the Nutrient Data Bank) and the ARS Nutrient Composition Laboratory (NCL). This support has greatly increased the availability of data on nutrients associated with chronic diseases, including heart disease and cancer.

- The ARS Nutrient Composition Laboratory has developed improved analytical methods for fatty acids, trace minerals, sugars, and vitamin B6, and has begun applying these methods in food analyses. New methods are being developed for carotenoids, B and C vitamins, and plant sterols.

- NIH and HNIS support research to develop methods of analysis for dietary fiber and carotenoids in foods, as well as to conduct the analyses. FDA has contributed to the research needed in these areas by coordinating collaborative efforts to define an official method of analysis for "total dietary fiber," which has been accepted by the Association of Official Analytical Chemists. Further work is underway to develop methods that will distinguish soluble and insoluble fiber.

- FDA and USDA, through frequent consultation, have encouraged industry to extend their analyses to nutrients not presently declared on nutrient labels.

- In response to a Congressional mandate, FDA and the Infant Formula Council coordinated a multi-phase collaborative study to develop appropriate methods for analysis of nutrients in infant formulas. Canadian and British government and food industry laboratories have participated in the project. More than 17 methods have been verified and approved for milk-based ready-to-feed formulas.

- A contract to establish an International Network of Food Data Systems (INFOODS) has primary support from the NIH with contributing support by FDA and USDA. The intent of this system is to improve the quality, availability, and exchange of food composition data on an international basis. Since this effort began in 1983, progress has included establishment of regional INFOODS liaison groups; an international directory of food composition data bases; a publication, the Journal of Food Composition and Analysis, which begins publication in 1987; and a publication on standards and guidelines for analysis and data base construction.

Dietary Knowledge and Attitude Assessment

- NCHS and HNIS surveys have provided a limited amount of information to improve the research base in this area. NIH and FDA, who have been most active in this area during the past five years, have contributed insofar as they address their individual mandates.

CHAPTER III

PROPOSED ACTIVITIES FOR THIS OPERATIONAL PHASE - 1987-1996

This section outlines activities that will be undertaken to achieve the goals set forth in the first chapter. A chronological calendar of events covering 1987 through 1996 is included to give a clearer picture of the temporal relationship of these activities.

GOAL A. Achieve a Comprehensive System Through Coordination Among NNMS Components

A.1. Include All Appropriate Nutrition Monitoring Activities

- This is a most important goal if the NNMS is to reach its full potential. As a first step, the Deputy Assistant Secretaries for Food and Consumer Services, USDA, and for Health (Disease Prevention and Health Promotion), DHHS, are overseeing the preparation of an inventory of Federal surveys and surveillance activities related to food, nutrition, and nutrition-related health conditions, for release in spring 1988.

- The activities comprising the inventory will be used as the basis for efforts to integrate and coordinate the relevant information sources. Initial efforts will concentrate on integrating DHHS and USDA surveys.

- To facilitate achievement of this goal, the Departments are exploring ways to strengthen interagency coordination. Options being considered include the establishment of an interagency coordinating committee on nutrition monitoring or broadening the scope of the Interagency Committee on Human Nutrition Research (ICHNR) to include nutrition monitoring activities beyond monitoring research. It is anticipated that a more formal interagency coordinating function on nutrition monitoring will be in place in 1988.

A.2. Improve Coverage of Major Population Groups at Risk

- An assessment of DHHS efforts to monitor the nutritional status of low-income populations is nearing completion. The study report, due in August 1987, focuses on provision of national level data and will identify gaps in coverage of nine broad low-income target populations: pregnant and lactating women, infants and preschool children, school-age children, adolescents, adults, nursing home residents, other elderly, native Americans living on reservations, and the homeless. Options for alleviating the identified gaps will also be proposed. The inventory of Federal monitoring activities described earlier in this chapter (Goal A.1.) will be useful for identifying gaps in population coverage beyond DHHS.

- As specific target groups are identified, the collective agencies will develop plans for the most effective way to provide data on the dietary and nutritional status of these groups. These may include special surveys for hard to reach groups, expansion of the Coordinated State Surveillance System, and use of follow-up surveys.

- Some gaps are well recognized and already being remedied. For example,

    * NHANES III will extend its coverage beyond the 75 year old cap used in NHANES II. In addition, the elderly will be oversampled in NHANES III as will blacks, Hispanics, and the very young.

    * The design used for CSFII-85 and CSFII-86 will be modified in 1989 and beyond to cover all sex-age groups. Results will be reported annually on a moving average basis. In addition, CSFII will target populations for detailed, extensive dietary status data. For example, the 1990 CSFII is planned to provide a special sample of elderly along with the all income and low-income samples. The decennial NFCS also continues to include a special sample of low-income households.

- In response to a Congressional mandate to assess the feasibility of developing a hospital-based system for identifying cases of severe undernutrition among low-income, high-risk children, CDC will establish pilot projects in at least two States. Efforts will be made to assist States (1) to develop and evaluate the feasibility of a population-based surveillance system (including hospital sources of cases) that identifies children with severe undernutrition; (2) to collect and analyze information on prevalences, etiologies, and risk factors; and (3) to facilitate appropriate intervention for children who are identified as severely undernourished.

A.3. Improve Temporal Coverage

- Future nutrition monitoring activities are planned so that a national population survey or surveillance activity is collecting data every year from 1987 through 1996. This will provide a mechanism for the continuous monitoring of dietary and/or nutritional status of the U.S. population. The planned activities by year are shown in Table 1.

A.4. Improve Comparability Among Surveys

- Within DHHS and USDA, working groups will devise solutions to ensure maximum comparability among core surveys while retaining the surveys separate objectives. These groups will continue to address specific issues related to comparability among the core surveys in the following areas: dietary recall methodology, specific sociodemographic variables, food composition data base, and sample design. CSFII will provide the opportunity to test various new techniques that could be incorporated into the next round of major surveys to improve comparability.

Table 1. Nutrition Monitoring Activities: Temporal Coverage*

Year	Diets		Nutritional Status		Food Supplies and Systems			Diet Know./Attitudes**		
	NFCS	CSFII	NHANES III***	CSSS	TDS****	Disappear-ance	FLAPS	HDS	NHIS	CSFII
1987	X			X	X	X		X	X	
1988	X		X	X	X	X	X			
1989		X	X	X	X	X		X		
1990		X	X	X	X	X	X		X	X
1991		X	X	X	X	X		X		X
1992		X	X	X	X	X	X			X
1993		X	X	X	X	X		X		X
1994		X	X	X	X	X	X			X
1995		X		X	X	X		X	X	X
1996		X		X	X	X	X			X

*Diets: **NFCS** = Nationwide Food Consumption Survey (USDA/HNIS); **CSFII** = Continuing Survey of Food Intakes By Individuals (USDA/HNIS);
Nutritional Status: **NHANES III** = Third National Health and Nutrition Examination Survey (DHHS/NCHS); CSSS = **CDC Cooperative State Surveillance System:** Pediatric and Pregnancy Nutrition Surveillance Systems; also Behavioral Risk Factor Surveillance System (DHHS/CDC);
Food Supplies and Systems: **TDS** = Total Diet Study (DHHS/FDA); **Disappearance** = Estimates of per capita food and nutrient supplies at or before retail (USDA/ERS, HNIS); **FLAPS** = Food Labeling and Package Survey (DHHS/FDA);
Dietary Knowledge and Attitudes: **HDS** = Health and Diet Survey (DHHS/FDA); **NHIS** = National Health Interview Survey Supplements (DHHS/NCHS); **CSFII** = Follow-up, Consumer Perceptions Survey (USDA/HNIS,FSIS AND DHHS/FDA).

**NIH supports dietary knowledge and attitude surveys directed towards current research needs such as the Cholesterol Awareness Survey.

***NHANES III will also provide quantitative assessments of nutrient intake from foods and from vitamin and mineral supplements.

****The Total Diet Study also estimates the intakes of various organic and elemental contaminants and nutritional elements in representative diets of specific age-sex groups. Currently 234 foods are collected, prepared for consumption, and analyzed.

- USDA and DHHS plan to examine the additional monitoring activities of the two departments beyond NHANES and NFCS for comparability with these two surveys. Where possible, specific changes in these activities will be recommended to increase comparability and enhance the usefulness of the results. For example, HNIS, the USDA Food Safety and Inspection Service (FSIS), and FDA plan to conduct a follow-up survey of CSFII-89 participants to assess their knowledge and attitudes about selected diet and health issues. This survey, the Consumer Perceptions Survey, will make possible for the first time a comprehensive examination of the links between attitudes about diet and health and food consumption behavior based on a national sample. Where this comparability among surveys is not feasible, an attempt will be made to understand the effect of the differences on the interpretation of the data bases. Consideration of data bases beyond DHHS and USDA is also anticipated, following the initial departmental effort.

- USDA has established an in-house working group to identify sampling design, analyses, and variables that are most appropriate for hypothesis testing, while considering the need for comparability with past NFCS and coordination with NHANES and other surveys in the system. Expert panels may be utilized to handle difficult questions particularly in the area of the sampling plan. Information assessed will include National Survey Data on Food Consumption: Uses and Recommendations (National Research Council, 1984) and Nutrition Monitoring in the United States: A Progress Report from the Joint Nutrition Monitoring Evaluation Committee (DHHS/USDA, 1986).

GOAL B. Improve Information Dissemination and Exchange

B.1. Continue Reporting System to Congress

- The second (1989) comprehensive report on nutrition monitoring will build on the framework established by the first report, Nutrition Monitoring in the United States: A Progress Report from the Joint Nutrition Monitoring Evaluation Committee, issued in 1986. It will include the following components:

  (1) An update of the dietary and nutritional status of the U.S. population;

  (2) An in-depth analysis of the capabilities of the NNMS to assess the status of people using NNMS health data, emphasizing nutrition factors in cardiovascular disease, and dietary data, focusing on iron intake. This analysis will look in particular at populations at risk, limits to interpretation of data, gaps in the data base, trends, and factors influencing nutritional status; and

  (3) Recommendations for strengthening the NNMS.

- The report will draw primarily on data released by DHHS and USDA since the first report, and may include other sources of data, such as the Bureau of Labor Statistics Consumer Expenditure Survey and the Bureau of the Census Survey of Income and Program Participation.

- Scientific evaluation and interpretation of data to provide the basis for the Departments' report will be obtained through a contract with an independent, scientific organization. Executive secretariat responsibility for the 1989 report rests with DHHS, and has been delegated to NCHS.

B.2. Continue Timely Reporting and Interpretation of Data

- Emphasis on timely release of data from NNMS activities will remain a primary objective. Data will be available in data tape as well as hard copy form.

- NCHS will complete release of data tapes with Hispanic HANES data in 1987. Subjects will include: dental data from all three portions of the survey (Mexican-American data were released in 1986), diabetes, gallbladder disease, and 24-hour dietary recall data.

- HNIS will complete release of data tapes and published reports of results on dietary status from CSFII-85 and CSFII-86 in 1987. Data from NFCS-87 on individual diets and on household food use and food cost will be released beginning in early 1988.

B.3. Develop Comparable Reports and Tape Documentation

- Joint USDA/DHHS working groups will work to develop common report and data tape documentation formats, data categories, and data arrays (e.g., tables). Such information will be shared with other contributors of NNMS data. Suggestions from organizations such as the Association of State and Territorial Public Health Nutrition Directors (ASTPHND) will be solicited.

- Efforts will be increased to present data in reports in ways to facilitate comparisons, such as presenting data in identical age ranges. Text in reports will also be included that facilitates statistical analyses and interpretation of data (e.g., possible design effects, coding rules and assumptions applied to the estimation of "unknowns," and other analytic procedures).

- Tape documentation presented for survey data will include information related to survey design (e.g., sample person selection, response rates, weighting methods), data collection (e.g., coding of missing values), and description of demographic variables (e.g., age and race).

- Data users conferences will include sessions or other structured opportunities specifically designed for giving and taking suggestions on improving the comparability of reports and tape documentation.

B.4. Increase Policy Relevance

- DHHS and USDA will increase interdepartmental and intradepartmental communication regarding policy issues and data needs related to these issues. The Departments recognize the need for a more concerted effort in this area so that the NNMS can provide the most useful information for decision-making to improve nutrition. Currently, agencies with major responsibility for nutrition monitoring solicit input from the regulatory, program, and research units during development of surveys and analysis plans for survey data. This process will be expanded to cover a broader range of monitoring activities and will emphasize interdepartmental issues. Coordination of this effort will be the responsibility of the Assistant Secretaries for Health (DHHS) and Food and Consumer Services (USDA).

- USDA will sponsor cooperative research with universities to use NNMS data to address issues relating to its programs in agriculture, food assistance, and nutrition education.

- DHHS's Nutrition Policy Board and USDA's Subcommittee on Human Nutrition will continue to serve as the mechanisms for raising, reviewing, and making recommendations about important policy issues within each Department. All agencies with interest and activities in nutrition are represented on these boards.

- In addition, suggestions about ways to increase the relevance of nutrition monitoring data for policy decisions will be solicited from departmental advisory groups such as the U.S. National Committee on Vital and Health Statistics and USDA's Board of Human Nutrition Scientific Counselors.

- Additional organized contact with Congress through more frequent updates on monitoring activities and findings may also be adopted. Congressional needs for NNMS data interpretation for policy decisions will continue to be considered in the preparation of the required reports to Congress on nutrition monitoring.

- Formal meetings of users, such as the NHANES Users Group meetings, the Nutrient Data Bank Conferences, and meetings of the Association of State and Territorial Public Health Nutrition Directors and the State Cooperative Extension Service Nutrition Specialists will be organized, where practicable, to encourage exchange of information on the real and potential policy value of data from NNMS component activities.

- Data from the NNMS will continue to serve as an integral component of the process of tracking progress toward meeting the 1990 National Health Objectives and in the development and subsequent tracking of National Health Objectives for the Year 2000.

B.5. Improve Information Exchange Between Data Users and Generators

Component organizations of the NNMS, especially NCHS and HNIS, will continue to identify and increase the numbers of users and uses of data through education, communication, and technical assistance activities. Public health and Extension Service users at the State and local level will receive special attention. Additionally, means to record and disseminate information on users and uses will be enhanced, as the following examples illustrate.

- Data user conferences will be held periodically to train potential users in effective ways of using data from the NNMS. These may be single agency efforts or efforts jointly sponsored by USDA and DHHS. The goal is to expand the pool of educated data users in research as well as in policy development and planning.

- Feedback will also be solicited from data users, particularly about scientific and methodologic problems, at data user conferences, as well as during workshops, and professional meetings. This information will be used to improve future surveys.

- It is anticipated that the semiannual NHANES Users Group meetings will continue, with FDA and NCHS continuing their coordinating role.

- Federally-supported research on dietary and nutritional status monitoring conducted by various universities provides information useful for NNMS activities. Cooperation and collaboration between the universities and NNMS agencies should serve to expand the pool of experienced data users and increase awareness of the data needs of researchers.

GOAL C. Improve the Research Base for Nutrition Monitoring

NNMS component agencies will strive to enhance the research base for nutrition monitoring. Research needed to facilitate the conduct of food consumption and nutrition surveys will be prioritized and, where appropriate, coordinated. Particular attention will be given to the recommendation of the JNMEC in this regard. Agencies responsible for specific monitoring system components will work formally to achieve this goal through the ICHNR and its Subcommittee on Nutrition Monitoring Research,[1] which was established in January 1987 to update and refine the research agenda for nutrition monitoring, drawing on the Federal five-year plan for nutrition research. The Subcommittee will also review the definition of nutrition monitoring research and clarify its components.

NNMS component agencies will continue their information exchanges with the nutrition research community. The activities put forth to achieve the second goal--improve information dissemination and exchange--will also strengthen the linkages with the nutrition research community.

In addition, agencies responsible for conducting surveys and surveillance activities will continue their ongoing research efforts directed toward specific monitoring issues, especially in the areas of food consumption and food composition measurements. Some examples follow.

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[1] The Subcommittee is co-chaired by the Deputy Assistant Secretary for Health (Disease Prevention and Health Promotion), DHHS, and the Deputy Assistant Secretary for Food and Consumer Services, USDA. Membership comprises representatives of specific nutrition monitoring activities in ARS, CDC, FDA, NIH, HNIS, and NCHS, and ICHNR members from the Agency for International Development, Department of Defense, DHHS, Veterans' Administration, and USDA Membership will be expanded to include representatives of other Federal monitoring efforts.

Food consumption measurement

- The lead for this area is shared by DHHS and USDA, who will continue to explore various researchable questions identified during the conduct of the national surveys. Such topics include dietary data collection methodology: serving size estimates; food frequency and recall method effects, and effects of probing on responses. The inter- and intra-variability of dietary intake is being studied to provide the understanding needed for improved assessment of diet adequacy.

Food composition measurement

- USDA (HNIS), the lead agency in this area, will maintain large food composition data bases specifically for assessing diets reported in national surveys. These data bases will be revised periodically and documented in ways that facilitate improved comparability of assessments across surveys and with subsequent surveys. Decisions about major additions or changes in the data base will be made by staffs in USDA and DHHS. Such data bases contain values for all nutrients assessed in the survey for all foods reported. Until analyses are available, best estimates will be imputed by HNIS staff. Information to fill gaps will be sought from industry and government laboratories and/or generated by supporting studies to conduct needed analyses.

- A computerized recipe system that documents the formulas assumed for food mixtures is an integral part of the HNIS nutrient data bases. Also, use of this system allows food mixtures reported in surveys to be broken down into their recipe components with their separate nutrient contributions.

- USDA and DHHS agencies will continue to support food composition research to improve data bases. Of special current interest are carbohydrates, especially dietary fiber, and carotenoids. A joint HNIS/ARS effort will provide better nationwide coverage by the Nutrient Data Base of selenium--currently not estimated in American diets because of the scarcity of reliable data and the variability of the nutrient in foods produced in different areas of the country.

- ARS's Nutrient Composition Laboratory will continue to develop new and improved methods for the analyses of nutrients in foods and to use them to provide more accurate and precise food composition data. These efforts receive some of their support from NIH, which also conducts food composition methods research.

- FDA will continue to examine iron bioavailability test methodologies, as well as analytic methods for different forms of fiber and for nutrient analyses of infant formulas and other foods.

- Current tasks of INFOODS will be completed in a year, and future activities and support are being planned.

Calendar of Events

This calendar highlights major activities during this operational phase. Updating is anticipated as plans for the second half of the phase are finalized.

1987	Nutrition monitoring coordination meetings: Quarterly meetings of the Assistant Secretary for Health (DHHS) and Assistant Secretary for Food and Consumer Services (USDA); NCHS/HNIS Coordinating Group; ICHNR (and Subcommittee on Nutrition Monitoring Research)[1]
1987	ICHNR Conference of Federally-Supported Human Nutrition Research Units and Centers.[2] Topics were dietary methodology and human nutrient requirements - February 24 and 25, ICHNR, NIH amd ARS
1987	Completion of CSFII-86, HNIS
1987	Start of NFCS-87, HNIS
1987	Start of NHANES III Pilot Tests, NCHS
1987	Health and Diet Study, Cycle 4, FDA[3]
1987	Nutrient Data Bank Conference[4]
1987	Information released on U.S. Food Supply in terms of food and nutrients, ERS and HNIS[4]
1987	NHANES Users Group, May and October, FDA Coordinates[5]
1987	ASTPHND Data Lab, HNIS, NCHS, FDA, and NIH
1987	HHANES Data Users Workshops in New York and Puerto Rico, NCHS
1987	Total Diet Study, FDA[4]
1987 or 1988	National Health Interview Survey Supplement on Dietary and Other Cancer Risk Factors, NCI and NCHS
1987 or 1988	National Telephone Survey of Weight-loss Practices, FDA and NHLBI
1988 or 1989	National Survey of Infant Feeding Practices, FDA

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[1] Quarterly meetings anticipated throughout this phase

[2] Biennial conferences anticipated throughout this phase

[3] Conducted every 18-22 months throughout this phase

[4] Annually throughout this phase

[5] Semiannual meetings anticipated throughout this phase

1988	Completion of NFCS-87, HNIS
1988	Release of Nutrient Data Base for Household Food Use, Release No.2., and Nutrient Data Base for Individual Intake Surveys, Release No. 4 (to be used in calculating nutrients in NFCS-87), HNIS
1988	Workshops for users of NFCS data, HNIS
1988	Start of NHANES III, NCHS
1988	Food Label and Package Survey (FLAPS), FDA[2]
1989	CSFII of general and low-income populations, each year 1989 through 1996, HNIS. Follow-up Consumer Perceptions Survey, HNIS, FSIS, and FDA
1989	Completion and forwarding to Congress of second NNMS report, DHHS/USDA
1990	Special survey of elderly persons with CSFII, HNIS
1990	National Health Interview Survey Supplement on Health Promotion and Disease Prevention Practices, NCHS
1991	Pilot test of new dietary survey procedures based on CSFII and NFCS-87 experience and methodology research
1991	Completion of NHANES III-Cycle 1 (first of two cycles), NCHS
1992	Completion and forwarding to Congress of third NNMS report, DHHS/USDA
1994	Completion of NHANES III - Cycle 2, NCHS
1995	Completion and forwarding to Congress of fourth NNMS report, DHHS/USDA
1995	National Health Interview Survey Supplement on Health Promotion and Disease Prevention Practices, NCHS

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[1] Quarterly meetings anticipated throughout this phase
[2] Biennial conferences anticipated throughout this phase
[3] Conducted every 18-22 months throughout this phase
[4] Annually throughout this phase
[5] Semiannual meetings anticipated throughout this phase

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APPENDIX 1

OVERVIEW OF DHHS AND USDA NUTRITION MONITORING SURVEYS AND SURVEILLANCE ACTIVITIES

DHHS and USDA surveys, surveillance activities, and related nutrition research and program activities are summarized below, and listed in the table at the end of this appendix, in relation to the five categories of measurement:

A. Health and nutrition status measurements
B. Food consumption measurements
C. Food composition measurements
D. Dietary knowledge and attitude assessment
E. Food supply determination.

A. HEALTH AND NUTRITIONAL STATUS MEASUREMENTS

- **National Health and Nutrition Examination Survey (NHANES)**: The NHANES, conducted periodically by the National Center for Health Statistics (NCHS), is the cornerstone of Federal efforts to monitor the overall nutritional status of the American people. NHANES consists of a series of surveys of probability samples of the United States population comprising over 20,000 persons each.

The surveys include physical examination, anthropometry, blood cell assessments, biochemical analyses of blood and urine, x-rays, functional assessment, health histories, and dietary intake interviews. They provide national estimates of diseases and health and nutritional characteristics of the U.S. population and selected subgroups. For example, through NHANES, physical and biochemical measurements are made which provide information about a number of nutrition-related conditions, including growth retardation; anemia; obesity; heart disease; hypertension; cerebral vascular disease; diabetes mellitus; vitamin, mineral, and trace element deficiency or toxicity; and heavy metal and pesticide exposures.

Two national surveys have been completed--NHANES I (1971-1974, ages 1-74 years) and NHANES II (1976-1980, ages 6 months-74 years). A third, NHANES III (1988-1994), is scheduled to begin in September 1988. Data will be collected on persons 2 months and older. Special sampling of infants, children, the elderly, and minority groups such as blacks and Hispanics will permit reliable estimates of the health and nutritional status of those groups. A survey for Hispanic Americans, HHANES, was conducted from 1982 through 1984. The HHANES had three components: Mexican Americans in the Southwest (about 9,900 persons sampled), Cuban Americans in the Miami, Florida area (2,300), and Puerto Rican Americans in New York City (3,800).

- **Other NCHS Surveys**: In addition to NHANES, a number of NCHS surveys and record systems provide important information for assessing the health effects of nutritional status. These include the National Health Interview Survey, NHANES I Epidemiologic Followup Study, National Natality Survey, National Survey of Family Growth, National Maternal and Infant Health Survey, and Vital Statistics System. These surveys are briefly described in the following paragraphs.

The National Health Interview Survey (NHIS) collects data on the incidence of illness and injuries, prevalence of chronic diseases and impairments, disability, physician and dental visits, hospitalizations, and other health topics, as well as on the relationships between demographic and socioeconomic characteristics and health status. The data are obtained from household interviews with a sample of the Nation's civilian, noninstitutionalized population; the survey is conducted annually. In addition, each year special health topics (supplements) are included. Recent and planned supplements particularly relevant to nutrition monitoring include disease prevention and health promotion (1985 and 1990), vitamin and mineral supplement use (1986), and cancer control (1987).

The NHANES I Epidemiologic Followup is a nationwide followup interview survey conducted in 1982-1984 of approximately 14,000 persons who participated in NHANES I. Respondents were asked about their health and hospitalization history, measurements of weight and blood pressure were taken, and household data were augmented by data from hospital records and death certificates. Continued followup of the study's elderly cohort was conducted by telephone in 1986. In 1987, contact is to be made with the full sample by telephone.

The National Survey of Family Growth provides data on family planning practices and attitudes, factors influencing trends, and differences in fertility and related aspects of maternal and child health. For example, it has produced information on frequency and duration of breast-feeding. The first two cycles of the survey were conducted in 1983 and 1976 with a sample of ever-married women ages 15-44. The survey will be fielded again in 1987. Data are collected through household interviews.

The National Maternal and Infant Health Survey, planned for 1988, has three components covering natality and fetal and infant mortality. Live birth, fetal death, and infant death records will be sampled and questionnaires sent to mothers and physicians, hospitals, and other medical care providers used by the mother. The major areas of investigation are causes of low birth weight infants and infant deaths; prenatal care; the effects of maternal smoking, drinking, and drug use; the effects of sexually transmitted diseases on pregnancy outcome; and the use of public maternal health programs by mothers and infants. The 1988 survey will be a combination of three earlier surveys--the National Natality Survey (1980), the National Fetal Mortality Survey (1980), and the National Infant Mortality Survey (1964-66).

The National Mortality Survey is designed to provide data on socioeconomic characteristics of deceased persons, use and payment for hospitals and institutional care during the patient's last year of life, and factors associated with health status, such as smoking habits. The data are collected with the use of questionnaires sent to the decedents' next of kin and to the institutions which provided health care, including hospitals, nursing homes, hospices, and other facilities. The survey was conducted annually from 1961 through 1968 and most recently in 1986.

The Vital Statistics Program is responsible for the nation's official vital statistics. Based on records filed in State vital statistics offices, the national program coordinates reporting, coding, and transmission of data on births, deaths, fetal deaths, induced terminations of pregnancy, marriages, and divorces. The vital statistics program produces annual data for the United States and for States, counties, and other local areas, and monthly provisional data for the United States and each State.

- **Coordinated State Surveillance System (CSSS)**: The Division of Nutrition, Center for Health Promotion and Education, Centers for Disease Control contributes to nutrition monitoring through the Coordinated State Surveillance System, which monitors the nutritional status of high-risk pediatric and pregnant populations through the collection of measurements readily available such as height, weight, hemoglobin and/or hematocrit. The system utilizes information from service delivery programs operated by participating State and local health jurisdictions and from the DHHS Bureau of Health Care Delivery and Assistance of the Health Resources and Services Administration (HRSA) to provide data on the prevalence of major nutritional problems in the targeted groups. The groups under surveillance are not a representative sample of the U.S. population, but are usually children and pregnant women from low-income families who voluntarily attend publicly-supported health and nutrition programs in States that participate in the CSSS. The CSSS provides information about the prevalence of overweight, underweight, retarded linear growth, and anemia among high-risk children. Among pregnant women, surveillance data are collected in regard to anemia, abnormal weight changes, fetal survival, birth weight of the child, and whether breast or bottle feeding is used and for how long. In 1986, 34 States, the District of Columbia, and Puerto Rico participated in the Pediatric Nutrition Surveillance System, and 14 States, the District of Columbia, and Puerto Rico participated in the Pregnancy Nutrition Surveillance System.

- **Behavioral Risk Factor Surveillance System (BRFSS)**: The BRFSS, initiated by CDC in 1984, is a State-based system that routinely collects data on the prevalence of behavioral risk factors associated with premature death and disability. These include nutrition-related risk factors such as obesity, hypertension, excessive alcohol consumption, and lack of physical exercise. In 1987 the BRFSS extends to more than 30 states and provides State-specific results which can be used for program planning and monitoring of trends.

- **Health Service Programs**: Nutritional assessment using height and weight measurements as well as hemoglobin or hematocrit determinations is undertaken directly through such DHHS health service delivery programs as Maternal and Child Health, Primary Care Programs (Rural-Urban), Migrant Health, and Indian Health Service programs administered by the Health Resources and Services Administration; the Early and Periodic Screening Diagnosis and Treatment (EPSDT) Program administered by the Health Care Financing Administration; and Head Start administered by the

Administration for Children, Youth and Families of the DHHS Office of Human Development Services. Data from these assessments are used primarily to determine protocols in the treatment of individuals.

Data from publically-funded food assistance, nutrition, or health service programs in participating States are provided on an ongoing basis to CDC's CSSS. Guidelines on prevention, screening, and follow-up of the nutritional disorders of children have been widely disseminated to health care providers in the private sectors by the Office of Maternal and Child Health, HRSA, as were publications to improve clinical care criteria for data collection and monitoring in private and public sites.

- **Nutrition Research Programs Related to Health and Nutrition Status Assessment**: As Contributors to the NNMS--As explained in the text, limited efforts are specifically directed toward the development of improved methods for the regular evaluation of nutritional status of populations and the conduct of surveys, i.e., to nutrition monitoring research. A variety of agencies, however, support other research efforts that contribute to the knowledge base for nutrition monitoring. These research efforts are explained in recent National Institutes of Health (NIH) and Department of Agriculture (USDA) publications (NIH, 1986; USDA, 1986). The publication, Human Nutrition Research: The Federal Five-Year Plan, which was submitted to Congress in 1986, summarizes the types of nutrition research conducted by the agencies of the Federal government and identifies six priority research areas. Topics relevant to nutrition monitoring are found in each of the six areas (ICHNR, 1986).

DHHS's NIH and USDA's Agricultural Research Service (ARS) are the major Federal contributors to research on nutritional status and epidemiological nutrition research. Within NIH, such research is sponsored by several of the individual institutes, including, the National Cancer Institute (NCI); National Heart, Lung, and Blood Institute (NHLBI); National Institute on Aging (NIA); National Institute on Child Health and Human Development (NICHD); National Institute on Diabetes, Digestive and Kidney Disease (NIDDK), as well as through its Clinical Nutrition Research Units (CNRU) and centers.

Investigator-initiated nutrition research constitutes the largest single area of NIH support; however, NIH supports numerous centers which provide core research support in addressing multidisciplinary biomedical problems which in turn provide an important stimulus to such investigator-initiated research. The NIH Clinical Nutrition Research Units are specific centers that are oriented to human nutrition research in health and disease. They serve as the focal point for clinical nutrition research activities, including on the relationship of nutrient intake and bioavailability to physiological function, assessment of nutritional status and body composition, and factors which influence these measures in health and disease.

ARS contributes principally to research on nutritional requirements and nutritional status through its five Human Nutrition Research Centers. In particular, the Western Human Nutrition Research Center at Letterman Army Institute of Research, San Francisco, California, conducts research on human nutrition requirements and on nutritional status, surveillance, intervention, and monitoring. The Center focuses on (1) identification of factors, forces, and trends resulting in malnutrition; (2) development of reliable, efficient, and inexpensive methods for defining nutritional status; (3) studies on nutritional requirements; and (4) development of nutritional criteria and methodologies to assist in design and evaluation of action programs.

Two of the centers focus on specific age groups of the population. The Children's Nutrition Research Center in Houston, Texas, is dedicated to the study of nutritional needs of pregnant and lactating women and of infants and children, with particular attention to the quantification of nutritional allowances and the attainment of optimal nutritional status. The Human Nutrition Research Center on Aging at Tufts University in Boston focuses on the nutritional requirements of the elderly, the role of nutrition in the aging process, and the prevention of diet-related disorders.

The remaining two centers have established research programs in nutritional requirements and status. The Beltsville Human Nutrition Research Center is seeking a more complete definition of human requirements for essential nutrients. The Grand Forks Human Nutrition Center develops recommendations for nutrient intakes and is attempting to identify useful nutrient forms, particularly of minerals.

As Users of NNMS Data--Increasingly, the research-oriented agencies are also becoming major users of data from the monitoring system, and through that mechanism will contribute information applicable to the design and analysis of future population surveys. NIH over the past several years has become a major user of data from the NNMS, and has contributed funds to a variety of NNMS activities. The extensive analyses using data from the NHANES I Epidemiologic Followup Survey as part of NIH's biomedical and behavioral nutrition research and training program are illustrative of this use. For example, data from the NHANES Followup Survey are being analyzed to assess the effects of three different obesity measures calculated during NHANES I--relative weight, body mass index, and subscapular skinfolds, on cardiovascular disease among men and women at different ages. Results of this analysis may provide information useful in determining appropriate obesity measures in future surveys.

B. FOOD CONSUMPTION MEASUREMENTS

- **Nationwide Food Consumption Survey (NFCS)**: USDA's periodic NFCS, conducted by the Human Nutrition Information Service (HNIS), is the cornerstone of Federal efforts to monitor overall dietary status of the American people. National surveys were conducted in 1935-36, 1942, 1948, 1955, 1965-66, and 1977-78. The year-long NFCS-77 included both household food consumption (7-day recalls) and dietary intake (3-day: 1-day recall followed by 2-day records) components. Information was obtained from 15,000 sample households in 48 States. More than 30,000 household members of all ages provided information on all foods and beverages ingested at home and away from home.

In 1977-78, supplemental NFCS surveys were conducted for the first time in Alaska (urban) and Hawaii (about 1,200 households each), and in Puerto Rico (over 3,000 households). Also, supplemental surveys were conducted in the 48 coterminous States among the elderly population (5,000 households) and low-income households receiving or not receiving food stamps (over 4,200 households). In 1979-80, a second food consumption survey among low-income households (over 3,000) was conducted to determine shifts in food consumption and nutritional adequacy which may have been associated with higher price levels and changes in Food Stamp Program regulations.

Special purpose surveys have also been conducted. For example, in 1984, a Congressionally-mandated survey of household food consumption was conducted in Puerto Rico to determine change in usage and expenditures occurring since 1977, when the first Puerto Rican survey was undertaken.

NFCS-77 and supplemental surveys provide measures of levels and shifts over time in the food consumed and in the nutritional content and adequacy of consumption by households and individual household members. In both household and individual intake surveys, nutritional values have been derived for food energy and 14 nutrients, based on USDA food composition data files. Recommended Dietary Allowances, published by the Food and Nutrition Board, were used in the development of indicators of nutritional adequacy of diets of individuals by 22 sex and age groups and of household food consumption. Also, information was provided for foods reported on their source, type, and cost, and on socioeconomic and other factors associated with food selection, consumption patterns, and eating practices.

NFCS-87 began data collection in April 1987. Information similar to that collected in NFCS-77 is being gathered from 6,000 sample households from all incomes and from a supplemental sample of 3,600 low-income households (130 percent of poverty income or less), both in the 48 coterminous States. The survey includes a 7-day recall of household food usage and prices paid for purchased food and a 3-day reporting of food intakes of about 25,000 household members of all ages, as in the NFCS-77. The number of nutritional components (plus energy) for which information is derived, however, has increased from 14 in 1977-78 to 27 in 1987-88.

- **Continuing Survey of Food Intakes by Individuals (CSFII)**: USDA's CSFII conducted in 1985 (CSFII-85) was the first longitudinal food intake survey to be conducted on a national scale. Six 1-day reportings of food intakes were obtained over a year at approximately 2-month intervals. Information on the first day's intakes was obtained by personal interview in the respondent's residence. Subsequent contacts were by telephone, if possible, or by personal interview.

Three sample groups were interviewed in 1985: women 19-50 years and their children 1-5 years, all incomes; women 19-50 years and their children, low-income (130 percent of poverty income or lower); and men 19-50 years (1-day intakes only). Information was obtained from women and children in approximately 1,200 sample households each in the core (all income) and low-income groups, and from males in 750 households. CSFII-86 surveyed women and children in comparably-sized all income and low-income samples. Questionnaires and interviewing procedures used in CSFII-85 and CSFII-86 were adapted from those used in the food intake phase of NFCS-77. Nutritional data are being derived fc- 27 nutritional components and food energy.

In 1989 and each year following between the larger NFCS, CSFII will collect information on small national samples of households in the general and low-income populations. Dietary data will be obtained from all household members and will be reported by sex and age categories on a moving average basis. The purposes of this survey are to track food and nutrient consumption continuously and to provide a survey mechanism for special studies of groups believed to be at nutritional risk. For example, a special survey of low-income elderly persons is planned as part of CSFII-90.

- Other HNIS Activities: HNIS conducts research to identify reliable, efficient, and inexpensive methods for conducting large-scale food consumption surveys. The agency also develops systems for timely and accurate processing and presentation of data.

- NHANES: Information on dietary status is also provided through NHANES. In private interviews with trained dietitians information is collected on eating patterns, food consumption (24-hour dietary recalls), source of foods (home, restaurant, etc.), frequency of consumption of grouped foods, use of supplements, use of salt at the table, and frequency of eating away from home. Intakes of energy and 17 nutrients are determined for 28 age-sex groups. This dietary information was collected for NHANES I (1971-1974), NHANES II (1976-80), and the survey for Hispanic Americans, HHANES (1982-84). Dietary information will be expanded in NHANES III, and will include nutrient intake from vitamin and mineral supplements.

- Total Diet Study: FDA's yearly Total Diet Study monitors the levels of various organic and elemental contaminants and nutritional elements in the U.S. food supply and estimates the intakes of these substances in representative diets of specific age-sex groups. It was updated in 1982 to reflect the food consumption patterns indicated by NFCS-77 and NHANES II. Currently 234 foods are collected, prepared for consumption, and analyzed for contaminants and nutritional elements four times each year. Intakes of these substances are estimated for eight age-sex groups. The yearly data from this program allow for the identification of changes and trends in the levels of over 200 contaminants and 11 nutritional elements in the food supply.

- Surveillance of Vitamin/Mineral Supplement Adverse Reactions: The FDA's surveillance system for identifying adverse reactions to food products and additives has been expanded to include surveillance of adverse reactions to vitamin/mineral supplements. This system is designed to identify and evaluate complex adverse reaction complaints received by FDA district offices and from physicians.

C. FOOD COMPOSITION MEASUREMENTS

- **Nutrient Data Bank (NDB)**: The USDA Nutrient Data Bank is the major mechanism for collecting, evaluating, storing, and collating nutrient composition data for individual foods. The task is substantial, because there are some 10,000 to 15,000 food items in the U.S. food supply, and data are being acquired for 60 to 100 nutrients or other food components. Data are being collected and entered into the NDB on a continual basis, but the availability of data on some nutrients is limited by the lack of suitable methods. Sources of data include Federal Government laboratories, including USDA's Nutrient Composition Laboratory (NCL) and DHHS's FDA; university research and commercial laboratories under government sponsorship; and analyses of nutrients in foods conducted by industry, primarily in support of the nutrition labeling program. The development of the NDB is keyed to the process of revising Agriculture Handbook No. 8, Composition of Foods...Raw, Processed, Prepared, which is the standard reference table on nutrient composition. Of the 23 sections now planned, 16 have been completed and published.

Nutrient composition files used in support of NFCS-77 have been updated extensively for use in CSFII, NFCS-87, and HHANES. The number of nutritional components has been increased from 14 to 28 plus food energy. Revisions include introductions and deletions of food items to reflect current usage, inclusion of additional nutrients, and changes in existing nutrient composition measures resulting from changes in foods, usage patterns, and new information from the food laboratories. In 1985, foods reported in HHANES were incorporated into the USDA data base. In 1986, computer data tapes used in CSFII-85 and HHANES Mexican-American survey were released for public use through the National Technical Information Service of the U.S. Department of Commerce.

- **Nutrient Composition Laboratory (NCL)**: This laboratory is part of the USDA Beltsville Human Nutrition Research Center located in Beltsville, Maryland. It provides essential data on the nutrient content of foods as consumed in the United States by (1) analyzing the nutrient content of foods in tested, dependable assay techniques; (2) developing either new or improved methods for the analysis of nutrients of foods; (3) developing sound sampling techniques to ensure that representative samples are analyzed; and (4) conducting research on the effect of food processing procedures and transportation and marketing methods, as well as home, institution, and restaurant food preparation procedures on the nutrient composition of foods. NIH provides some financial support to this laboratory.

- **Total Diet Study**: As part of FDA's Total Diet Study--described under food consumption measurements--234 commonly consumed foods are collected, prepred for consumption and analyzed four times each year for over 200 contaminants and 11 nutrients.

- **Food Label and Package Survey (FLAPS)**: FDA conducts a biennial probability survey of retail packaged foods using commercial market research data bases (A.C. Nielsen Co.). The survey involves approximately 1,500 individual food brands representing about 44 percent of the packaged food supply in retail dollar terms. Data are interpreted on a share-of-market sales basis. The data are the basis for the FDA food ingredient and declared ingredient data banks, and are utilized for multiple special studies. By this tracking system, significant changes in the food industry's labeling practices are rapidly identifiable for most major food classes.

Since 1977, the FDA has maintained a surveillance program for nutrition labeling. A representative sample of the 55 percent of processed foods which bear nutrition labels is analyzed. Annually, approximately 300 foods are analyzed for an average of 8 nutrients, involving in excess of 2,000 individual analyses. This surveillance program permits FDA to track the evolution of nutrition labeling in the food supply, assure necessary levels of accuracy of label values, and identify segments of the industry which require encouragement. This activity also permits early identification by FDA of new fortification practices by industry. When combined with consumer studies, assessments of the value of nutrition labeling are possible.

- **Other FDA Activities**: FDA's methodological research focuses on improved methods to measure dietary fiber and nutrients in different foods, particularly trace minerals, fat-soluble vitamins, cholesterol derivatives, and trans-fatty acids. FDA is currently directing and participating in a collaborative effort to develop official methods for analysis of nutrients in infant formulas. This is necessary for insuring the quality and safety of infant formulas. FDA also is participating in a collaborative effort to improve methods for determining iron bioavailability.

D. DIETARY KNOWLEDGE AND ATTITUDE ASSESSMENT

- **Health and Diet Survey**: Periodically since 1978 FDA has conducted surveys based on national probability samples of households to measure public attitudes, knowledge, and practices about food and nutrition, particularly as they relate to such health problems as hypertension, hypercholesterolemia, coronary heart disease, and cancer. Each survey involves detailed telephone interviews of about 4,000 persons randomly designated from adults in a household.

Studies of this type permit rapid acquisition of knowledge about public attitudes and practices relative to foods and nutrition, as well as estimates of concerns and elements of confusion. Through this mechanism practices such as avoidance of certain food substances through use of food labels are clearly identified (e.g., avoidance of fats, sugars, etc.), as are impacts of health and nutrition information programs. In addition, assessments are made of the influence of nutrition misinformation and the public's ability to comprehend food label information. Since 1982, these surveys have been cosponsored by NIH.

- **Survey of Infant Feeding Practices**: The FDA will conduct a prospective survey of infant feeding practices among pregnant women in 1988 or 1989. The survey will include prenatal interviews and monthly contacts with the mother throughout the infant's first year of life in order to determine what aspects of pre- and post-natal care, as well as demographics, health care visits, and other factors influence feeding practices.

- Survey of Weight-Loss Practices: A national probability survey of adults will be undertaken by FDA in 1987 or 1988 to determine dieting and weight-loss practices. The breadth and extent of weight control practices will be examined demographically and also in relation to reasons for dieting, self-reports of health status, physician involvement, sources of information, attitudes about food and dieting, and other situational factors influencing weight control behavior. NIH contributed to the development of this survey.

- NCHS Surveys: NHANES provides a limited amount of information in this area through questions about breast-feeding practices. The National Maternal and Infant Health Survey should also contribute information about feeding practices. The National Health Interview Survey special topic surveys provide information about diet-related behaviors.

- NFCS and CSFII: Previous NFCS and CSFII surveys have assessed knowledge and attitude only insofar as behavior in terms of food consumption, food purchases, and eating practices can be used as proxy measures for dietary knowledge and attitude. Certain questions in these surveys, such as those on self-evaluation of food sufficiency, avoidance of certain foods or types of foods, and reasons for not participating in the Food Stamp Program were reflections of attitudes. HNIS, FSIS, and FDA are planning a follow-up Consumer Perceptions Survey of CSFII respondents in 1989 and beyond. From these data, knowledge and attitudes about selected diet and health issues can then be associated with food consumption behavior, also measured in CSFII.

- NIH: The National Institutes of Health, particularly NCI, NHLBI, and NIDDK, provide information about dietary knowledge and practices directed toward specific diseases and chronic conditions. Several of the larger efforts include: the physicians and public cholesterol awareness surveys conducted in 1986 by NHLBI and the survey of nurses' and dietitians' knowledge and attitudes toward cardiovascular disease risk factors planned for 1988.

The latter is unique because it will provide national data on nurses and dietitians, who play a critical role in prevention and management of cardiovascular disease. Registered nurses, occupational health nurses, and registered dietitians involved in patient care will be surveyed by mail to determine their behavior, knowledge, beliefs, and attitudes related to the three major cardiovascular disease risk factors: high blood pressure, elevated blood cholesterol, and cigarette smoking. There will be an initial mailing in the fall of 1988 and two successive mailings provided to nonrespondents. This study will provide information to help plan the professional education efforts of the National High Blood Pressure Education Program, the National Cholesterol Education Program, and the NHLBI Smoking Education Program. The survey will also provide baseline data for the evaluation of these programs.

E. FOOD SUPPLY DETERMINATIONS

- **Supply Data**: USDA'S Economic Research Service (ERS) estimates annually the quantities of various foods that "disappear" into civilian consumption. These estimates are derived from statistics on the production or marketing of farm products, foreign trade, and stock changes; the flow of foods through warehouse and/or retail markets; and ad hoc studies of special products. They are expressed as national averages per capita and show levels of food supplies each year since 1909 in food quantities and price-weighed indices.

HNIS estimates the quantities of food energy (calories), 23 nutrients, and cholesterol provided by the per capita food supply each year. These data can be used to alert the Department if food supplies, when efficiently and equitably distributed, are not sufficient to provide recommended amounts of nutrients for the population. Also they are useful for showing trends since 1909 in food and nutrient consumption relative to statistics on nutritional health and incidence of disease. They also show trends in the relative importance of foods as providers of nutrients in the food supply.

- **Demand Studies**: A variety of ERS activities contribute information about the nature of the national food supply and patterns of consumption. Of particular importance are economic and marketing information which permit evaluation of aggregate shifts in food consumption and price-consumption relationships. Efforts of this kind are important in assessing changing food consumption patterns and may presage nutritional problems. HNIS and ERS use the NFCS data to predict the demands for foods by households of given characteristics (income, race, sex-age composition, food assistance program participation, etc.).

Appendix 1 Table: Nutrition Monitoring and Related Activities

CATEGORY	ACTIVITY	DEPARTMENT*	AGENCY*	POPULATION	TIMING
HEALTH AND NUTRITIONAL STATUS MEASUREMENTS	National Health and Nutrition Examination Surveys	DHHS	NCHS	U.S. population, Special Groups	
	NHANES I			1-74 yrs	1971-1974
	NHANES II			6 mo-74 yr.	1976-1980
	Hispanic HANES			6 mo-74 yr	1982-1984
	NHANES III			2 mo +	1988-1994
	National Health Interview Survey	DHHS	NCHS	U.S.	Annual
	NHIS Special Topics	DHHS	NCHS	U.S.	Selected Topics
	NHANES I Epidemiologic Followup	DHHS	NCHS	NHANES I Elderly	1982-1984, 1987, 1986
	National Survey of Family Growth	DHHS	NCHS	Women 15-44	1976, 1983, 1987
	National Maternal & Infant Health Survey	DHHS	NCHS		Planned 1988
	National Mortality Survey	DHHS	NCHS		Annual 1961-1968, 1986
	Vital Statistics	DHHS	NCHS	U.S., States, Counties, Local areas	Annual
	Coordinated State Surveillance System	DHHS	CDC	Pregnant women, Children in	Continuous
	Behavioral Risk Factor Surveillance System	DHHS	CDC	Adults	Continuous
	Nutrition Research in Support of Nutrition Monitoring**	DHHS USDA	NIH ARS CDC FDA	Varies	Ongoing

Continued ...

Appendix 1 Table: Nutrition Monitoring and Related Activities, page 2 ...

CATEGORY	ACTIVITY	DEPARTMENT*	AGENCY*	POPULATION	TIMING
FOOD CONSUMPTION MEASUREMENTS	Nationwide Food Consumption Survey	USDA	HNIS	U.S., Low-income Sample	every 10 years current 1987-88
	Continuing Survey of Food Intakes By Individuals (CSFII)	USDA	HNIS		
	1985 and 1986			Women 19-50, Their Children, Men, Low-income Sample	Annual
	1989 and beyond			U.S. population, Low-income Sample, Other	Annual (planned)
	NHANES	DHHS	NCHS	U.S. population	See Prior Page
	Total Diet Study	DHHS	FDA	Specific Age-Sex Groups	Annual
	Vitamin/Mineral Supplement Adverse Reactions	DHHS	FDA	U.S.	Continuous
FOOD COMPOSITION MEASUREMENTS	Nutrient Data Bank	USDA	HNIS		Continuous
	Nutrient Composition Laboratory	USDA	ARS		Continuous
	Food Labeling and Package Survey	DHHS	FDA		Annual and biennial parts
	Total Diet Study	DHHS	FDA		Annual
	Fiber, Carotenoid and Vitamin A comp. Studies; Taurine and Biotin Comp. Studies	DHHS	NIH/NCI NIH/NIDDK		Ongoing Ongoing

Continued ..

Appendix 1 Table: Nutrition Monitoring and Related Activities, page 3 ...

CATEGORY	ACTIVITY	DEPARTMENT*	AGENCY*	POPULATION	TIMING
DIETARY KNOWLEDGE AND ATTITUDE ASSESSMENT	Health & Diet Survey	DHHS	FDA	U.S. Adults	18-22 Mo. Intervals
	Survey of Infant Feeding Practices	DHHS	FDA	Pregnant Women	1988 or 89
	Survey of Weight-Loss Practices	DHHS	FDA NIH/ NHLBI	U.S. Adults	1987 or 88
	Cholesterol Awareness Survey	DHHS	NIH/ NHLBI +FDA	Physicians Adults	1986
	Nursing and Dietitian Survey	DHHS	NIH/ NHLBI	Nurses, Dietitians	1986, 1987
	NHIS Special Topics Health Promotion/ Disease Prevention Vit/Min Supplement/ Cancer Control	DHHS	NCHS +NIH/NCI	U.S. Adults	 1985 1986 1987
	CSFII Follow-up (Consumer Perceptions Survey)	USDA/ DHHS	HNIS FSIS FDA	U.S. Population	Planned 1989-1996
	Physician Knowledge Survey on Hypertension	DHHS	NIH/ NHLBI	Physicians	1978-1988
	Cancer Prevention Awareness Program	DHHS	NIH/ NCI	U.S. Adults	1984 + Ongoing
FOOD SUPPLY DETERMINATIONS	Supply Data	USDA	ERS HNIS	U.S. Population	Annual
	Demand Studies	USDA	ERS	U.S. Population	Continuous

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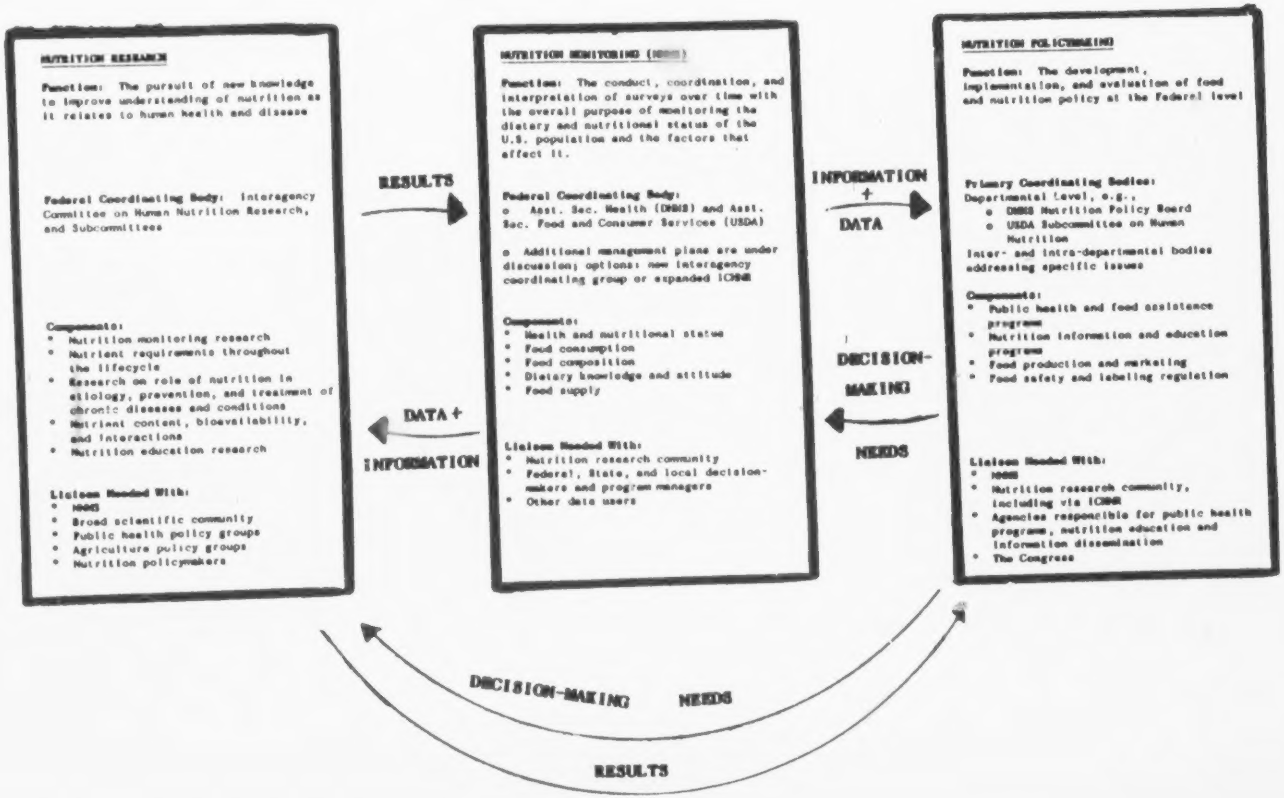
* ARS = Agricultural Research Service, CDC = Centers for Disease Control, DHHS = Department of Health and Human Services, ERS = Economic Research Service, FDA = Food and Drug Administration, FSIS = Food Safety and Inspection Service, HNIS = Human Nutrition Information Service, NCHS = National Center for Health Statistics, NCI = National Cancer Institute, NHIS = National Health Interview Survey, NHLBI = National Heart, Lung, and Blood Institute, NIDDK = National Institute of Diabetes and Digestive and Kidney Diseases, NIH = National Institutes of Health, USDA = U.S. Department of Agriculture

**Includes research on nutritional status assessment and requirements throughout the life cycle. The nutritional status research focuses on (1) indices of nutritional status, (2) micromethods to measure nutrient concentrations in various tissues and plasma, and (3) methods that improve accuracy of dietary intake data.

APPENDIX 2
NUTRITION RESEARCH, MONITORING, AND POLICYMAKING: FUNCTIONS, COMPONENTS, AND RELATIONSHIPS



NUTRITION RESEARCH

Function: The pursuit of new knowledge to improve understanding of nutrition as it relates to human health and disease

Federal Coordinating Body: Interagency Committee on Human Nutrition Research, and Subcommittees

Components:
- Nutrition monitoring research
- Nutrient requirements throughout the lifecycle
- Research on role of nutrition in etiology, prevention, and treatment of chronic diseases and conditions
- Nutrient content, bioavailability, and interactions
- Nutrition education research

Liaison Needed With:
- NNMS
- Broad scientific community
- Public health policy groups
- Agriculture policy groups
- Nutrition policymakers

NUTRITION MONITORING (NNMS)

Function: The conduct, coordination, and interpretation of surveys over time with the overall purpose of monitoring the dietary and nutritional status of the U.S. population and the factors that affect it.

Federal Coordinating Body:
o Asst. Sec. Health (DHHS) and Asst. Sec. Food and Consumer Services (USDA)

o Additional management plans are under discussion; options: new interagency coordinating group or expanded ICHNR

Components:
- Health and nutritional status
- Food consumption
- Food composition
- Dietary knowledge and attitude
- Food supply

Liaison Needed With:
- Nutrition research community
- Federal, State, and local decision-makers and program managers
- Other data users

NUTRITION POLICYMAKING

Function: The development, implementation, and evaluation of food and nutrition policy at the Federal level

Primary Coordinating Bodies:
Departmental Level, e.g.,
  - DHHS Nutrition Policy Board
  - USDA Subcommittee on Human Nutrition

Inter- and intra-departmental bodies addressing specific issues

Components:
- Public health and food assistance programs
- Nutrition information and education programs
- Food production and marketing
- Food safety and labeling regulation

Liaison Needed With:
- NNMS
- Nutrition research community, including via ICHNR
- Agencies responsible for public health programs, nutrition education and information dissemination
- The Congress

Attachment 2

MECHANISMS OF COMMUNICATION

REGULAR ACTIVITIES

I. HANES Users Group (3 conferences per year)

Location: Washington, DC

Contact: J. Pennington, Ph.D., Food and Drug Administration, Washington, D.C. (202-245-1064)

II. NCHS Data Tape Users Conference (biennial)

Contact: R. Weinzimer, Scientific and Technical Information Services Branch, National Center for Health Statistics, Hyattsville, MD (301-436-8500)

III. Publications

Vital and Health Statistics Series Reports:
- Series 1, Programs and Collection Procedures
- Series 2, Data from the National Health Survey (Statistical Methods)
- Series 11, Data from the National Health Survey (Results from NHANES)

Health, United States (published annually since 1978)

Catalog of Public Use Data Tapes, 1988 (DHHS Publication No. (PHS) 88-1213)

NCHS "Data Line" 1987 in Review, 1988 (Reprints of "Data Line" columns from Public Health Currents)

Catalog of Publications 1980-87, 1988 (DHHS Publication No. (PHS) 88-1301)

Monthly NCHS Column in American Journal of Public Health

Numerous articles in peer reviewed journals, such as American Journal of Clinical Nutrition,

Reports by Life Sciences Research Office, FASEB

Contacts: S. Smith, Chief, Scientific and Technical Information Services Branch, National Center for Health Statistics, Hyattsville, MD (301-436-8500) and R. Murphy and/or C. Woteki, Division of Health Statistics, National Center for Health Statistics, Hyattsville, MD (301-436-7068)

IV. Report of Findings at National Meetings

Presentations and poster sessions at such meetings as Federation of American Societies for Experimental Biology, American Public Health Association, American Dietetic Association, American Society of Clinical Nutrition, American Statistical Association, American Heart Association.

Contact: C. Alexander, Administrative Assistant, Division of Health Statistics, National Center for Health Statistics, Hyattsville, MD (301-436-7068)

V. University Visitation Program

Catalog of University Presentations 1988-89, 1988

Contact: K. Harris, Program Coordinator and Statistical Standards Special Assistant, National Center for Health Statistics, Hyattsville, MD (301-436-7111) and R. Murphy, Director, Division of Health Statistics, National Center for Health Statistics, Hyattsville, MD (301-436-7068)

VI. Exhibit booths at annual professional meetings

Meetings include American Public Health Association, American Heart Association, Gerontological Society of America, Population Association of America, American College of Nurse Midwives, Mid-Atlantic Health Congress, Medical Library Association, Society of Epidemiologic Research, Association for Health Services Research, American Hospital Association, American Psychological Association, American Statistical Association, and American Dietetic Association.

Contact: R. Weinzimer, Scientific and Technical Information Services Branch, National Center for Health Statistics, Hyattsville, MD (301-436-8500)

VII. Technical Assistance

This is an ongoing activity performed by all levels of NCHS staff.

SPECIAL ACTIVITIES

I. HHANES Workshops for researchers interested in Hispanic health issues

Locations: University of California- Los Angeles(UCLA), 1986 UCLA
Spanish-speaking Mental Health Center, 1986
School of Public Health — Houston, 1986
Stanford University, 1986
Boston University, 1987
Columbia University, 1987
University of Puerto Rico, 1987, 1988

Contact: C. Johnson, Chief, Nutritional Statistics Branch,Division of Health Statistics, National Center for Health Statistics, Hyattsville, MD (301-436-7072)

II. HHANES Newsletter for researchers interested in the survey (circulation 1700)

Contact: S. Smith, Scientific and Technical Information Services Branch, National Center for Health Statistics, Hyattsville, MD (301-436-8500)

III. Symposia at National Meetings to Report Findings

American Public Health Association, 1986,1987
FASEB - American Institute of Nutrition, 1988

Contact: C. Woteki, Ph.D., Deputy Director, Division of Health Statistics, National Center for Health Statistics, Hyattsville, MD (301-436-7068)

IV. Workshops on Uses and Analysis of NHANES Data

Target Audience/location: Association of State and Territorial Public Health Nutrition Directors, Rhode Island, 1986
School of Public Health, University of Tampa, 1989
FASEB - American Institute of Nutrition, 1989

Contact: C. Woteki, Ph.D, Deputy Director, Division of Health Statistics, National Center for Health Statistics, Hyattsville, MD (301-436-7068)

Attachment 3

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public He

National Institutes of Health
National Heart, Lung, and
Blood Institute
Bethesda, Maryland 20892

Dear Colleague:

The September issue of The Atlantic contains an article entitled "The Cholesterol Myth" by Thomas Moore. This article includes a series of errors and omissions about the National Heart, Lung, and Blood Institute (NHLBI), about the National Cholesterol Education Program (NCEP), and about the science which supports the NCEP. I would like to correct some of the errors in the article and share with you our response.

As you know, we encourage and promote debate when there is a disagreement about a scientific or programmatic issue in which the Institute has a stake. And we seek consensus before moving ahead with a public education program that can affect millions of people. But when science provides a clear indication of a benefit such as lowering high blood cholesterol to reduce the risk of heart disease, and when the scientific and public health communities form a strong consensus around an issue such as cholesterol and heart disease, we feel confident, in fact compelled, to move forward with a professional and public education program. This is precisely why the Institute initiated the National Cholesterol Education Program.

Unfortunately, the article in The Atlantic may cause many individuals who should be legitimately concerned about their cholesterol level to conclude that "the cholesterol myth" was fabricated by "the medical elite" to "raise the Institute's public profile." To correct the inaccuracies in The Atlantic article, we have taken the following steps:

- I have written a letter to the editor of The Atlantic responding to the major errors and distortions in the article.
- I have submitted an article to The New York Times for publication on the opinion-editorial (OP-ED) page. This article responds to the errors in The Atlantic article and reiterates the strength of the science on which the NCEP is based.
- We are preparing a detailed refutation of the major errors made in The Atlantic article and we will submit our refutation to a refereed publication.
- Our information office has prepared separate packets of information for professionals and for the general public who contact our office for information on cholesterol.
- We are working on a daily basis with print and electronic journalists to reiterate the strength of the science on which NCEP is based and the importance of lowering high blood cholesterol.

Page Two

Finally, let me assure you that our commitment to advancing the science about cholesterol and to sharing the results of our science with professionals and the public remains resolute. Heart disease continues to be the number one killer of Americans. In recent years, science and public education programs have had a profound impact in reducing death and disability due to heart disease and stroke. NHLBI has played a role in this decline, and we expect to continue this role for years to come.

Sincerely yours,

C. Lenfant

Claude Lenfant, M.D.
Director

STATEMENT ON THE NATIONAL CHOLESTEROL EDUCATION PROGRAM

Prepared by the National Heart, Lung, and Blood Institute

In reference to: "The Cholesterol Myth," by Thomas J. Moore, in the September 1989 issue of The Atlantic Monthly

Approximately 60 million American adults have elevated blood cholesterol levels which, in combination with other risk factors, place them at high risk of coronary heart disease. Despite impressive declines in mortality rates over the past 20 years, coronary heart disease remains the leading cause of death in the U.S. It is the number one killer of men and of women. Each year coronary heart disease kills more than 500,000 Americans, and the annual economic toll (in direct costs and lost productivity) is over $110 billion.

In 1985, the National Heart, Lung, and Blood Institute (NHLBI) launched the National Cholesterol Education Program (NCEP) in order to reduce death and disability from heart disease by controlling high blood cholesterol. The NCEP was built on the firm foundation of conclusive scientific evidence that lowering high blood cholesterol reduces the risk of coronary heart disease. Through broad programs of professional, patient and public education, the NCEP's goal is to help all Americans benefit from the results of decades of research on a pressing public health problem.

Mr. Moore's article challenges the notion that cholesterol is a health problem that can be solved by concerted attack. The NCEP and the major scientific, medical and voluntary groups concerned with heart disease believe they have a clear imperative, based on scientific research, to take public health action on a problem that affects such a large number of American adults.

/

The basis of the NCEP is powerful scientific evidence that elevated blood cholesterol levels play a causal role in coronary heart disease. Congruent findings from many different lines of research -- animal, genetic, metabolic, epidemiologic, and clinical -- establish the importance of elevated cholesterol levels in causing coronary heart disease and the importance of cholesterol lowering.

The evidence relating diet (including saturated fatty acids and cholesterol) to blood cholesterol levels and coronary heart disease is compelling and derived from a huge amount of research representing many different scientific approaches. This research includes studies of several different animal species, a variety of human populations, and people who have moved from areas with low heart-disease rates to areas of high heart-disease rates.

Research has also shown that it is possible--through diet alone--to lower a person's cholesterol level enough to affect that individual's risk of heart disease. Many studies have found that dietary change alone can cause a 10 to 15 percent average reduction in blood cholesterol. Often this is enough to have an impact on lowering coronary heart disease risk.

Although the Atlantic article questions the research on the benefits of cholesterol lowering, three recent clinical trials have more than adequately addressed that issue: the landmark Coronary Primary Prevention Trial (CPPT), the Cholesterol Lowering Atherosclerosis Study (CLAS), and the Helsinki Heart Study.

CPPT showed a 49 percent reduction in coronary heart disease in people who reduced their cholesterol by more than 25 percent. CLAS found that coronary bypass patients treated with a cholesterol-lowering drug and a low cholesterol diet, had regression of atherosclerosis. This was clearly shown on angiography. The Helsinki Heart Study found a 34 percent lower rate of coronary heart disease in men on a cholesterol-lowering regimen.

Other clinical trials have found that cholesterol reductions lead to reductions in total mortality; they include the Stockholm Ischemic Heart Disease Study, the follow-up of the Coronary Drug Project--nicotinic acid evaluation, and the 102-month follow-up of the Oslo Diet/Smoking Study.

The strength of the evidence has led to an international scientific consensus that:

- Elevated levels of total and LDL-cholesterol are a cause of CHD.
- Dietary factors -- especially saturated fatty acids -- have a strong effect on the levels of total and LDL-cholesterol.
- Lowering cholesterol levels will reduce the risk of illness and death from heart attacks.

This consensus has been expressed in the reports of the Surgeon General of the United States, the National Research Council, and the 19-nation European Atherosclerosis Society.

In the U.S., a wide range of experts and organizations has concluded that the evidence not only supports but requires a concerted nationwide effort to reach professionals and the public. Over 35 organizations from the private and public sectors representing medical and health professionals, community and voluntary groups, and governmental agencies -- such as the American Medical Association, the American Heart Association, and the American College of Cardiology -- have joined in a partnership with NHLBI to form the NCEP Coordinating Committee, the program's leadership body.

These groups have reached a consensus that it is necessary to put in the hands of all Americans information on how to lower elevated cholesterol levels, thereby reducing the risk of the #1 threat to their longevity -- coronary heart disease. While there remain important scientific questions about cholesterol that still have to be answered, there is no longer well-founded scientific controversy about whether high blood cholesterol levels should be reduced. The question now is simply: what are the best ways to do so?

Current guidelines for detecting and treating high blood cholesterol levels in adults have been developed by the NCEP's Adult Treatment Panel. As mentioned above, it is estimated that individuals with high blood cholesterol will, on average, experience a 10-15% drop in cholesterol levels using diet as the mainstay of therapy. Most Americans with high blood cholesterol will be able to lower their levels with diet alone.

The role of drug treatment--and NCEP's position on this issue--was inadequately and incorrectly addressed in the Atlantic article. The article failed to mention that the Expert Panel of the NCEP emphasized the limitations of drug use and required that "drugs of first choice" must have been shown to be sufficiently safe over long-term use. All responsible physicians recommend that drugs should be used only with caution, given the long-term nature of cholesterol-lowering therapy. Drugs should be reserved for high-risk individuals who stand to benefit the most from cholesterol-lowering treatment. For these people, drug treatment can be an important means of reducing their risk of coronary heart disease.

Clearly, approaches that can lower cholesterol levels are available and are known to work. The challenge is to find ways to encourage their application by professionals and the public. The NCEP has already achieved substantial gains - the percent of the public who have had their cholesterol levels checked has risen from 35 percent in 1983 to 66 percent in 1989, and visits to the doctor for high blood cholesterol are up five-fold since the program was launched.

This country has an enormous opportunity to take an action that will help continue the decline in coronary heart disease death rates: reduce the prevalence of elevated blood cholesterol levels. The NCEP is thus the embodiment of NHLBI's commitment not only to enlarging and strengthening the base of scientific knowledge about cholesterol, but to using it to improve the health of the American people.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health
National Heart, Lung, and
Blood Institute
Bethesda, Maryland 20892

Dear Inquirer:

Recently you may have heard some questions raised about whether there is really a relationship between high blood cholesterol and heart disease.

We would like to assure you that there is no longer any well-founded scientific controversy about whether coronary heart disease is related to high blood cholesterol. Nor is there any question that reducing high blood cholesterol levels lowers the risk of heart attack.

On the contrary: there is powerful scientific evidence, from many lines of research, that elevated blood cholesterol levels are an important cause of coronary heart disease. Research also has conclusively linked diet to blood cholesterol levels and has established that it is possible--for most people, through diet alone--to lower blood cholesterol levels enough to reduce your heart disease risk.

The benefits of reducing blood cholesterol have been established in three recent clinical trials:

- The Coronary Primary Prevention Trial showed a 49 percent reduction in coronary heart disease in people who reduced their blood cholesterol by more than 25 percent.
- The Cholesterol Lowering Atherosclerosis Study found that coronary bypass patients treated with a cholesterol-lowering drug and a diet low in saturated fat and cholesterol had slowing of their atherosclerosis; some even had regression of their atherosclerotic plaques.
- The Helsinki Heart Study found a 34 percent lower rate of coronary heart disease in patients on a blood cholesterol lowering regimen.

The strength of this and other compelling evidence has led to an international scientific consensus that lowering blood cholesterol levels will reduce the risk of illness and death from heart attacks. On the basis of that consensus, major scientific, medical, and voluntary groups joined the National Heart, Lung, and Blood Institute (NHLBI) in 1985 to plan and launch the National Cholesterol Education Program (NCEP). These organizations saw that they had a clear responsibility, based on scientific research, to alert the public to a health problem that affects such a large number of American adults. (About 60 million American adults have high blood cholesterol levels, and each year coronary heart disease kills more than 500,000 Americans.)

TESTIMONY OF ANN CHADWICK
ACTING ASSISTANT SECRETARY FOR FOOD AND CONSUMER SERVICES
U.S. DEPARTMENT OF AGRICULTURE

BEFORE THE

Subcommittee on Department Operations, Research, and
Foreign Agriculture and the Subcommittee on Domestic Marketing,
Consumer Relations, and Nutrition of the Committee on Agriculture
and the Subcommittee on Science, Research and Technology of the
Committee on Science, Space, and Technology

September 21, 1989

Mr. Chairman and members of the Committee, I am Ann Chadwick, Acting Assistant Secretary for Food and Consumer Services of the U.S. Department of Agriculture (USDA). Accompanying me today are Dr. James Heimbach, Acting Administrator, Human Nutrition Information Service, Dr. Robert Rizek, Director, Nutrition Monitoring Division, and Dr. Susan Welsh, Director, Nutrition Education Division, Human Nutrition Information Service. I would like to thank you for the opportunity to discuss the Department's nutrition monitoring activities and to comment on H.R. 677, the National Nutrition Monitoring and Related Research Act of 1989 and H.R. 1608, the Comprehensive National Nutrition Monitoring System Act.

USDA has a serious commitment to nutrition monitoring and is working diligently to improve the system in feasible and cost effective ways. We believe that with a few modifications, H.R. 1608 would enable us to continue the progress we have made in the past few years. H.R. 1608 would legislatively establish the concept of a National Nutrition Monitoring System, while omitting many of the management and reporting requirements of H.R. 677.

H.R. 677 is identical to S. 1081, legislation pocket vetoed by President Reagan on November 8, 1988. This Administration also opposes H.R. 677. We believe that its management and reporting requirements would consume scarce resources that could be better used for the collection and processing of data on the dietary status of the population.

Nearly 2 years ago, USDA and DHHS submitted an Operational Plan for the National Nutrition Monitoring System (NNMS) for the years 1987-96. This plan (which would be required by H.R. 677, Title I, Sec. 102(a)(2) and H.R 1608, Sec. 1426b(a) is an update of the 1981 Implementation Plan mandated by Congress. The Operational Plan describes three broad goals for us to work toward during the 10-year period. They are: achieve a comprehensive system through coordination among NNMS components; improve information dissemination and exchange; and improve the research base for nutrition monitoring. I believe these goals address most, if not all, of the purposes stated in the bills you are considering.

My remarks today will cover the activities USDA is committed to perform and how these contribute to the goals of the NNMS Operational Plan. For your convenience, I have included with this statement a temporal chart showing USDA's surveys and the National Health and Nutrition Examination Survey (NHANES) of DHHS (Attachment I). Appendix Table I of the Operational Plan lists the many other components of the NNMS by the type of data they provide.

First, how are we achieving a comprehensive system through coordination of the NNMS components? The Human Nutrition Information Service (HNIS) is the lead USDA agency for nutrition monitoring. Up to now, our major emphasis has been on coordinating USDA's Nationwide Food Consumption Survey (NFCS) with the NHANES. Much progress has been made. For example:

o The questionnaires used in a recent NHANES and that proposed for use in NFCS 1987-88 were compared prior to the beginning of the NFCS 1987-88 data collection. Thirty-eight variables were studied by a joint working group from USDA's HNIS and DHHS's National Center for Health Statistics (NCHS). For many of these variables, little or no difference existed between the two questionnaires. Improvements were made to attain closer linkage where appropriate. We have documented the changes we made in the NFCS 1987-88 questionnaire.

For a few variables, such as definition of income, there are conceptual differences related to the different purposes of the two surveys. This should not be viewed as a weakness. NNMS provides data for many different purposes. It is not possible to design a single survey that will adequately meet the needs of these two surveys. Recognizing these divergent needs of these two surveys. Recognizing these differences is essential.

- Another joint working group reviewed the dietary intake methodology used by both NFCS and NHANES--the 24-hour recall--for comparability. Suggested changes included use of a single food-coding system and nutrient data base for surveys of both Departments and the addition of the NFCS set of measurement aids to the NHANES set of models.

  Once again, identical procedures are not possible because of fundamental differences in how these surveys are conducted. For example, NFCS is conducted in the home while NHANES takes place in the Mobile Examination Center. A report of the suggestions and how they might be implemented is available.

- Improvements in the comparability of data reporting have been put in place with NFCS 1987-88 and NHANES III. For example, the same age groupings will be used by both as well as similar documentation formats for both printed reports and data tapes.

A similiar review process for comparability was used again prior to final questionnaire clearance for NHANES III and HNIS's 1989 Continuing Survey of Food Intakes by Individuals (CSFII).

Another task is to improve our coverage of monitoring activities. To facilitate this, DHHS and USDA have established the Interagency Committee for Nutrition Monitoring (ICNM) as called for in H.R. 677, Title I, Sec. 101(c) and H.R. 1608, Sec. 1426a(a). ICNM is chaired by the Assistant Secretary for Health, DHHS, and the Assistant Secretary for Food and Consumer Services, USDA. It is a parallel group to the Interagency Committee for Human Nutrition Research (ICHNR). The ICNM has representatives from each of the USDA and DHHS agencies involved in monitoring activities as well as representatives from the Department of Defense (DOD), the Department of Commerce, the Department of Labor, and the Veterans Administration (VA). The ICNM has set up working groups to address specific topics, including Federal-State relations/ information dissemination and exchange, survey complementarity, and food composition data.

A NNMS Directory, called for in H.R. 677, Title I, Sec. 103(b)(11) and H.R. 1608, Sec. 1427, will be available this fall. The Directory, which describes the various NNMS activities in detail, should be a useful tool for interested parties inside and outside the Federal Government.

The Operational Plan points out two other important objectives as part of the coordination goal--improved timeliness of reporting of survey data and coverage of high risk individuals. USDA has designed the CSFII with these goals in mind. This survey was initiated in 1985. We have completed two years of data collection from specific high risk groups--women 19-50 years of age and their children 1-5 years of age, including a separate low-income sample as mandated by the Food Security Act of 1985. A sample of men, 19-50 years of age, was included in 1985.

The first results of the 1985 CSFII were released only six months after data collection was completed. We have now completed the release of all of the reports and data tapes from both the 1985 and 1986 surveys. We are extremely proud of the new effort represented by the CSFII and the timely release of data from the first two years.

The CSFII is the first attempt to assess a national sample on a continuous basis ever initiated in this or any other country. The ability to track and forecast dietary problems on a continuous basis is increasingly important as Americans respond to shifts in variables that affect diet, such as employment, family makeup, income, and perceptions about diet/health relationships. The CSFII results have been useful to USDA and others in formulating and supporting policies relating to dietary status, dietary guidance, food assistance programs, and food production and marketing. For example:

- o Nutrient distributions of 4-day dietary intakes suggest that folacin, iron, zinc, vitamin B-6, magnesium and calcium are problem nutrients for women. These are the same six problem nutrients identified in the 1977 NFCS. These findings are true regardless of income.

- o Most children studied, especially those 1-3 years old, failed to meet the RDA for iron, zinc, and calcium.

- o Appropriate targeting of the Food Stamp Program was shown: households receiving food stamps fared as well or better nutritionally as those food stamp eligible households who were not program participants. This was despite the fact that the households participating in the Food Stamp Program had lower incomes than the

- Changes in eating patterns were apparent when the 1985-86 data were compared to the 1977-78 NFCS. Women were drinking more low-fat milk and eating less red meat. Their overall percentage of calories from fat declined to 37 percent from 41 percent. The change in meat consumption was most dramatic for high-income women. Interestingly, these high-income women did not reduce their fat intake as much as might be expected because they got more of their fat from creamy desserts, salad dressings, table fat, and cheeses instead of from red meat.

- Consumption of 300 milligrams or less of cholesterol, as suggested by the National Heart, Lung and Blood Institute and the National Research Council Report on Diet and Health, was achieved in 62 percent of the women's 4-day diets.

- Only 12 percent of women had fat intakes over four days that furnished less than 30 percent of calories; 33 percent had diets with fat providing less than 35 percent of calories. Those women whose diets were below 35 percent of calories from fat had lower mean intakes of calcium, iron, and zinc.

The CSFII was reinstated on April 1 of this year. The survey has been redesigned to support moving-average reporting as a cost-effective means of providing trend information in a timely manner. The moving-average approach, recommended by two committees of the National Academy of Sciences, will be used in CSFII to provide annual estimates of three days of dietary intakes for all sex-age groups. The continuous data collection and analysis of dietary status as planned for the CSFII is called for in H.R. 677, Title I, Sec. 103(a)(1) and (b)(2) and in H.R. 1608, Sec. 1426b(c)(2).

The collection of three days of intake data is an important aspect of all USDA surveys. One-day intakes are appropriate for estimating mean nutrient intakes by population segments. However, research indicates that data on individual food intakes for at least three days are needed to assess the proportion of the population meeting standards such as the Recommended Dietary Allowances.

The CSFII has been designed to accommodate modules from other agencies with concerns relative to nutrition monitoring. A cooperative effort among HNIS, USDA's Food Safety and Inspection Service, and DHHS's Food and Drug Administration (FDA) was established to conduct a survey on consumer attitudes on diet/health issues as a followup to the 1989 CSFII. This project represents the first time that a nationwide sample is being used to study the relationship between individuals' actual dietary intakes and their attitudes about dietary behavior. Such cooperative ventures build on the FDA experience in conducting attitude surveys and HNIS experience in conducting food consumption surveys.

CSFII, with its yearly data collection and reporting, is both economical and flexible. It maximizes staff productivity and provides a flexible structure into which topical issues and methodological investigations can be incorporated.

NFCS 1987-88 data collection began in April 1987 and ended late last year. In addition to data on intakes of individuals, the NFCS includes information on the foods used by households during a seven-day period and the cost of those foods. Data from this survey will form the research basis for a new revision of the Thrifty Food Plan, which is in turn the basis for Food Stamp Program allotments. A computerized model will be used to form a food plan which minimizes deviation from the food consumption patterns of low-income households while meeting nutritional specifications at given costs.

We are now analyzing a study designed to assess the effect on measurement of food intakes of procedural and data base changes between NFCS 1977-78 and NFCS 1987-88. We call this a "bridging survey." Preliminary analysis indicates that our substantial improvements in procedures have not lessened the comparability of the results between the surveys.

The combination of the decennial survey (NFCS) and the smaller continuous survey (CSFII) has several advantages. The decennial survey provides data from sufficiently large groups to study differences among population segments with regard to socioeconomic factors associated with food consumption and expenditure patterns. The smaller surveys are used to monitor trends in food intakes by the general and low-income populations. The CSFII is designed so that high risk groups (Hispanics, native Americans, elderly, etc.) can be targeted.

In designing these surveys and their questionnaires, we contacted numerous government agencies and individuals in academia, industry and public health nutrition for their input. This is in addition to the close collaboration with NCHS described earlier.

The second goal of the 1987 Operational Plan is to improve information dissemination and exchange, again goals covered by H.R. 677 and H.R. 1608. The Departments have implemented a reporting system that integrates the results of the monitoring system components into common reports. The first report to Congress on the nutritional status of the population was made in 1986 by a Federal advisory committee (Joint Nutrition Monitoring Evaluation Committee) jointly sponsored by USDA and DHHS. This report provided baseline data for dietary and nutritional status.

A second report will include an update on the dietary and nutritional status of the U.S. population based on survey data released since publication of the first report. It will also include an indepth analysis of nutritional factors affecting cardiovascular disease and iron nutriture. The Life Sciences Research Office (LSRO) of the Federation of American Societies for Experimental Biology (FASEB) has prepared this scientific evaluation and interpretation of NNMS data. An ad hoc Expert Panel on Nutrition Monitoring, composed of persons outside the Government who represented a variety of disciplines, including agricultural economics, nutrition, behavioral sciences, epidemiology, public health, and statistics, was selected by LSRO to prepare this report. USDA briefed the Expert Panel on USDA monitoring activities and on results from the CSFII, and provided analytical support. We expect the LSRO report to be available by the end of September 1989. A similar reporting system would be required by H.R. 677, Title I, Sec. 102(a)(8).

We are continuing to work with state and local groups interested in nutrition monitoring to increase the usefulness of our data to them. USDA and DHHS participated in several workshops sponsored by the Association of State and Territorial Public Health and Nutrition Directors (ASTPHND) during 1986 and 1987. These were practical sessions designed to improve state and local personnel's knowledge of the NFCS, CSFII and NHANES data files. Such activities are called for in H.R. 677, Title I, Sec. 103(a)(5) and (b)(9) and H.R. 1608, Sec. 1426b(c)(11).

We currently sponsor the National Nutrient Data Base Conference (NNDBC) which meets annually to discuss issues pertinent to this food composition data base as well as to nutrition monitoring activities. We plan to begin an NFCS's User's group along the model of the NNDBC.

These groups bring data users together for the purpose of learning how to use these large data bases effectively. At the same time, such conferences give USDA an opportunity to receive valuable input from all sectors for improvement of the data system. However, we are aware that many interested individuals and groups may not have easy access to up-to-date information about the NNMS. We are exploring several ways to communicate our activities more widely in an efficient and cost-effective manner.

USDA continues to provide indepth analysis of the CSFII and NFCS data bases with specific emphasis on policy relevant issues, including those relating to agriculture, food assistance, and nutrition education. Most of this work is done through competitive cooperative agreements with universities. Eight such studies have been completed using the 1985-86 CSFII and three new agreements have recently been signed using data from the household food use portion of the NFCS 1987-88. Three additional studies using data from the individual intake portion of the NFCS are now being negotiated.

The final goal of the 1987 Operational Plan is to improve the research data base for nutrition monitoring, points addressed by H.R. 677, Title I, Sec. 103(a)(3) and H.R. 1608, Sec. 1426b(c)(13). The ICNM, made up of representatives from HNIS, Agricultural Research Service (ARS), FDA, NCHS, Centers for Disease Control, National Institutes of Health (NIH), VA, and DOD, addresses ways to prioritize and coordinate research activities in high priority areas. A working group of the ICNM has been formed to focus on food composition data as a first step in improving research on such data.

Such a system of identifying and prioritizing research needs works well within USDA. HNIS and the Nutrition Composition Laboratory of ARS have a well established system of priority setting with respect to food composition data. Such data are an essential part of the nutrition monitoring system. The Department has made significant advances in the past decade in nutrient analyses and the National Nutrient Data Bank. In 1977, reliable food composition data were available to evaluate the intakes of individuals for calories and 14 nutrients. By 1985, reliable data were available for 28 nutrients. Added nutrients and other food components include many considered to be of public health importance--cholesterol, fatty acids, dietary fiber, sodium, potassium, carotene, folacin, zinc, copper, and vitamin E. Not only has the number of nutrients been expanded, but the quality of the food composition data has increased significantly. This is due to improved methods for laboratory analysis as well as improved sampling on a nationwide basis of those foods that contribute significantly to the intakes of specific nutrients.

Progress in relation to long-term plans for the revision of Agriculture Handbook No. 8 "Composition of Foods...Raw, Processed, Prepared" continues. To date, 18 of the 22 sections have been published. The remaining sections are expected to be completed by 1990 with revisions of already published volumes well underway. Noticeable among these is the revision of "Beef and Beef Products" which is expected to be out later this year. It will reflect the changes in marketing, particularly fat trim, that have been introduced in the past several years.

One of the primary problems in keeping pace with health and disease concerns is anticipating which nutrients will be a major concern in the future. When it was hypothesized that selenium might be a deterrent to cancer, major emphasis was directed towards determining the selenium content of foods. Because the selenium content of a specific food varies depending on where it is grown, this work required a major sampling of foods across the country. However, by 1990, we expect to be able to add selenium to the nutrient data base for evaluating intakes from the CSFII.

We also plan to update the CSFII nutrient data base in 1990 by adding data on the individual fatty acids present in foods. Formerly, the association between fat intake and various disease states emphasized the prevalence of classes of fatty acids, i.e., saturated, monounsaturated and polyunsaturated classes. New research recognizes the important differences among individual fatty acids within these classes. The addition of individual fatty acid data will thus improve the quality and usefulness of the data base for distinguishing these differences and will greatly expand our current classifications of fat consumption.

With the increased interest in fiber in the diet, HNIS has initiated an international collaborative research project on dietary fiber analysis. Laboratories in the United Kingdom, Canada, and the U.S. are analyzing 50 U.S. foods by the official Association of Official Analytical Chemists method and three other procedures. Evaluation of this collaborative research will greatly enhance the quality of fiber data in the future.

During the past several years, we have begun to focus more closely on possible coordination on nutrition monitoring research priorities at all the ARS Human Nutrition Research Centers. The process includes regular meetings of the Center Directors with the HNIS Administrator and staff. From these exchanges, a greater understanding of the problems at hand is achieved.

HNIS also works with universities and others to answer specific research questions. For example, the Department has undertaken 13 major methodological studies in the past 12 years. These studies were designed to increase the validity and reliability of survey results while minimizing costs. They expanded understanding of many survey elements including interview modes (mail, telephone, personal), respondent support needed (probes), measurement aids for more precise estimation of portion size, reliability of surrogate reporting, respondent burden, number and spacing of days to sample, varied sizes of nutrient data base, response errors, and food frequency questions. Several studies were directed toward determining the appropriate data collection methodology for CSFII, improving the timeliness of data reporting, and increasing responses from minorities (blacks, Mexican-Americans, and American Indians) and the elderly. A summary of these studies is available. The total cost of these studies was $4,471,000.

It should be clear from these activities that USDA has a serious commitment to the NNMS and is working diligently to improve the system in feasible and cost effective ways. The Department's FY 89 budget contains $6.4 million for monitoring activities carried out by HNIS. Additional human nutrition research is conducted by the USDA through other agencies--ARS and the Cooperative State Research Service (CSRS).

We believe H.R. 677 would make it very difficult to further implement many of the activities I have described here. As I have already stated, USDA and DHHS have taken a number of steps over the past few years to improve the NNMS. We believe these efforts are completely in accord with the purposes set forth in H.R. 677.

There are a number of specific provisions in H.R. 677 which we cannot support. The bill sets up a management structure for NNMS and details very specific requirements for a comprehensive plan. In addition to the Interagency Board which we have already put in place, H.R. 677, Title II, Sec. 201(a) requires a nine member Advisory Board and Title I, Sec. 101(d) would authorize the appointment of an administrator of nutrition monitoring and related research. With or without an Administrator and staff, the requirement for the Advisory Board and the preparation of an annual report by the Council, in addition to biennial reports from the Secretaries, would place significant burdens on those agencies responsible for collecting and analyzing the monitoring data.

H.R. 677 would require also that two grant programs be set up. One would be a competitive grants program to "accelerate the development of uniform and cost-effective standards and indicators for the assessment and monitoring of nutritional and dietary status for relating food consumption patterns to nutritional and health status" (Title I, Sec.102(a)(4). The other would be a grant program "to encourage and assist state and local governments in developing the capacity to conduct monitoring and surveillance of nutritional status, food consumption and nutrition knowledge and in using such capacity to enhance nutrition services" (Title I, Sec.102(a)(5). Title I, Sec. 105 requires the Secretaries to coordinate appropriate scientific research and development by the National Science Foundation, National Aeronautic and Space Administration, National Oceanic and Atmospheric Administration, the National Institute of Standards and Technology, and other suitable Federal agencies.

Perhaps the most troubling portion of H.R. 677 is Title I, Sec.103(b)(2), which would require by 1990, a new survey or at least one in addition to NHANES, NFCS, and CSFII. This new survey would be a "stratified probability sample of the people of the United States designed to permit statistically reliable estimates of high risk groups and geo-political or geographic areas...." Title I, Sec. 103(a)(1) and (2) define these terms as preschool and school-age children, pregnant and lactating women, elderly individuals, low-income populations, blacks, Hispanics, Native Americans, and the homeless. Although the Secretaries are given discretion here, one survey providing statistically reliable estimates for all these categories would be very large and costly.

We welcome suggestions concerning NNMS, but we believe H.R. 677 would present serious management burdens and delay improvements in the valuable activities already underway. In addition, requirements of this legislation would generate significant increases in expenditures for the Advisory Council, the Administrator and staff, the grant programs, and new or expanded surveys. Yet, in 6 of the last 7 years, Congress has failed to appropriate the President's budget request for HNIS.

H.R. 677 and H.R. 1608 also address the issue of dietary guidance. USDA and DHHS have a long history of human nutrition research and of translating these research findings into usable information for the healthy American public. The Food and Agriculture Act of 1977 (PL 95-113) designated the USDA as the lead agency of the Federal Government for research, extension, and teaching in food and agricultural sciences (with the exception of biomedical aspects), including human nutrition. With this legislation, Congress supported USDA's traditional emphasis on the nutritional needs of normal, healthy individuals rather than the needs of individuals requiring clinical or therapeutic dietary support. In Section 1421, the 1977 Act states "It is hereby declared to be the policy of the United States that the Department of Agriculture conduct research in these fields of human nutrition and nutritive value of foods and to conduct human nutrition education activities..."

Within USDA, eight agencies have ongoing programs which promote and implement the Dietary Guidelines for Americans. These agencies and their primary food and nutrition information and education responsibilities are:

- The Extension Service operates Food and Nutrition Education Programs in partnership with the Cooperative Extension System to disseminate knowledge and applied research directly to the general public. It also operates the Expanded Food and Nutrition Education Program (EFNEP), a mandated program for low-income families and youth.
- The Human Nutrition Information Service coordinates dietary guidance policy, develops research-based dietary guidance materials for the general public, and reports results from its research in food composition, food consumption, and nutrition education to professionals.
- The National Agricultural Library, through its Food and Nutrition Information Center, collects and disseminates information on a wide range of nutritional topics and accumulates and loans nutrition education materials to educators.
- The Agricultural Research Service and the Cooperative State Research Service report results from their programs of food and nutrition research through professional organizations, publications, and reports of accomplishment to Congress and the public.
- The Food Safety and Inspection Service is responsible for the safety, wholesomeness, and accurate labeling of meat and poultry products and for informing the public on safe handling of these foods.

- The Agricultural Marketing Service is responsible for the grading of foods and for the accuracy of promotional materials of some commodity groups.

- The Food and Nutrition Service supports the nutrition education components of the food assistance programs they administer, e.g., the Special Supplemental Food Program for Women, Infants, and Children and the Food Stamp Program.

- The Office of Governmental and Public Affairs provides, reviews, coordinates, and publishes all food and nutrition information disseminated by USDA.

We and DHHS have taken seriously the need for the Federal Government to speak with one voice when issuing dietary guidance. Consumers need messages that are not confusing or conflicting if they are to act on them in an appropriate way. To aid in this effort, a Dietary Guidance Working Group was formed within USDA at the beginning of 1986. This group reviews all guidance from USDA going to the general public to insure its consistency with the Dietary Guidelines for Americans. We believe this has strengthened dietary guidance messages going out to various audiences. DHHS provides a liaison member to the USDA working group and we send a liaison representative to their Subcommittee on Dietary Guidance. USDA continues to endorse and promote the Dietary Guidelines for Americans as the best information available for the general public. We have a number of research projects underway to help us deliver the message in more effective ways to various target populations--from school-age children to the elderly, low-income and upper-income. This has been and remains a primary function of USDA. Our most recent public education effort in dietary guidance is the campaign "Eating Right . . . The Dietary Guidelines Way." The

Campaign includes four new consumer booklets containing advice on how to shop for food, fix quick meals, eat out and enjoy snacks for a healthier diet. The booklets also contain information on planning menus, preparing food and making bag lunches and desserts.

A Federal advisory committee has been jointly established by USDA and DHHS to examine the 1985 edition of the Dietary Guidelines in light of new scientific evidence to determine if a change in any of the Guidelines is necessary. This Committee held their second meeting in early August of this year. The Committee will report their recommendations to the Secretaries of the Departments.

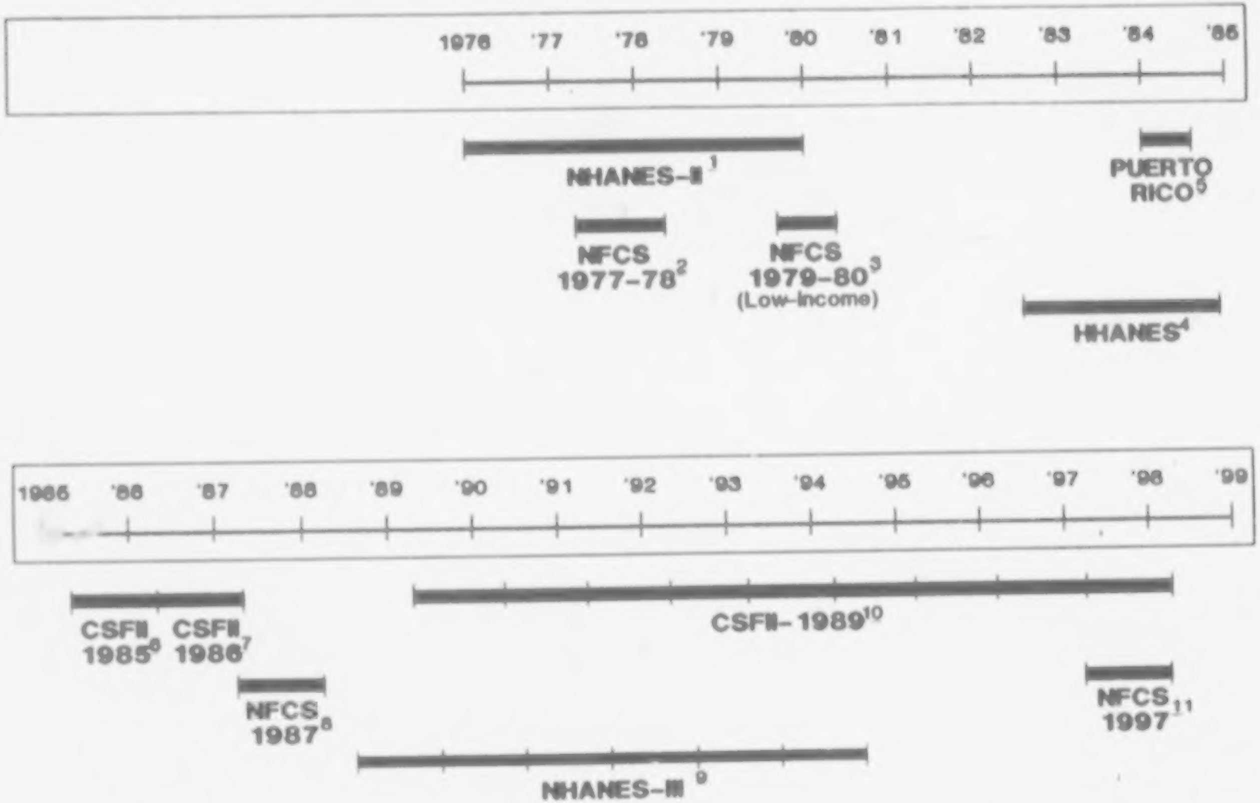
The objections I have cited, along with the positive results from the current nutrition monitoring system, lead us to the conclusion that H.R. 677 is unnecessary and would even delay the implementation of our monitoring goals, which are consistent with those of the proposed legislation. However, we believe that H.R. 1608, amended to incorporate certain changes--the most notable being the removal of the bill's veto arrangement on the issuance of dietary guidelines--is in line with our mutual goals and is significantly less costly.

Mr. Chairman, thank you again for giving me the opportunity to speak with you today. My colleagues and I would be happy to respond to your questions.

(Attachments follow:)

ATTACHMENT I

National Nutrition Monitoring Surveys



1/ NHANES II
Probability sample of the civilian, noninstitutionlized population of the U.S. aged 6 months through 74 years, 1 day individual dietary intake.

2/ NFCS 1977-78
Basic -- Stratified probability sample of all private households in the conterminous U.S.; all ages, household food use and 3 days individual dietary intake.

Low-Income -- Stratified disproportionate probability sample of all low income (eligible for food stamps) private households in the conterminous U.S.; all ages, household food use and 3 days individual dietary intake.

Elderly -- List sample (provided by Social Security Administration) of individuals 65+ years of age; household food use and 1 day individual dietary intake.

Alaska -- Stratified area probability sample (urban only) of all private households; all ages, household food use and 3 days individual dietary intake.

Hawaii -- Stratified area probability sample of all private households; all ages, household food use and 3 days individual dietary intake.

Puerto Rico -- Probability sample of all private households; all ages, household food use and 3 days individual dietary intake.

3/ NFCS 1979-80
Low-Income -- Stratified disproportionate probability sample of all low income (eligible for food stamps) private households in the conterminous U.S.; all ages, 3 days individual dietary intake.

4/ NHANES 1982-84
Three samples of Hispanic Americans; i.e., Mexican-Americans (five States in the Southwest), Cuban-Americans (Dade County, Florida), and Puerto Ricans (portions of New York, New Jersey, and Connecticut), aged 6 months through 74 years; 1 day individual dietary intake.

5/ NFCS Puerto Rico 1984
Stratified disproportionate probability sample of all private households; household food use only.

6/ CSFII 1985

Basic -- Stratified probability sample of all private households in the conterminous U.S. that contained one or more women who were 19 to 50 years of age and their children 1 to 5 years of age; up to 6 days of individual dietary intake.

Low-Income -- Stratified probability sample of all private households at or below 130 percent of poverty in the conterminous U.S. that contained one or more women who were 19 to 50 years of age and their children 1 to 5 years of age; up to 6 days of individual dietary intake.

Men -- Stratified probability sample of all private households in the conterminous U.S. that contained one or more men who were 19 to 50 years of age; 1 day of individual dietary intake.

7/ CSFII 1986

Basic -- Same as 1985

Low Income -- Same as 1985

8/ NFCS 1987

Basic -- Stratified probability sample of all private households in the conterminous U.S.; all ages, household food use and 3 days individual dietary intake.

Low Income -- Stratified probability sample of all private households at or below 130 percent of poverty in the conterminous U.S.; all ages, household food use and 3 days of individual dietary intake.

9/ NHANES III, 1988-94 -- Probability sample of the civilian, noninstitutionalized population of the U.S. aged 2 months plus; 1 day individual dietary intake.

10/ CSFII 1989+

Basic -- Stratified probability sample of all private households in the conterminous U.S.; all ages, 3 days of individual dietary intake.

Low Income -- Stratified probability sample of all private households at or below 130 percent of poverty in the conterminous U.S.; all ages, 3 days of individual dietary intake.

Data from the CSFII-89+ samples will be reported using a cost-efficient moving-average approach. The first data will be reported following the 1990 data collection.

Low-Income Elderly (planned for 1991) -- Stratified probability sample of all private households at or below 130 percent of poverty in the conterminous U.S. that contain one or more persons 65+ years of age; 3 days of individual dietary intake.

11/ NFCS 1997 (planned) -- Same as NFCS 1987.

EATING
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United States Department of Agriculture

Human Nutrition Information Service

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(301) [illegible]

NEW INITIATIVE IN NUTRITION EDUCATION OUTREACH

The U.S. Department of Agriculture's Human Nutrition Information Service (HNIS) is initiating its new consumer nutrition education campaign called "Eating Right...The Dietary Guidelines Way." The purpose of the campaign is to increase awareness of the Dietary Guidelines for Americans and to help people put the Dietary Guidelines into action in their lives.

What are the Dietary Guidelines? They are seven simple guides to good nutrition, first published in 1980 and slightly revised in 1985 by the U.S. Departments of Agriculture and of Health and Human Services. They are substantiated by a large body of evidence derived from many different kinds of research and represent the best, most current advice on healthful diets. The first two Guidelines encourage people to eat a variety of foods that provide enough essential nutrients and calories to maintain a desirable weight; the other five describe special characteristics of good eating, suggesting people eat an adequate amount of starch and fiber and avoid too much fat, sugar, sodium, and alcohol.

The Campaign Kickoff. HNIS is releasing four new consumer booklets containing practical advice to help Americans put the Dietary Guidelines into practice. Their wording, design, and layout reflect responses from a series of reviews by focus groups and interviews with selected household food managers in shopping malls. The booklets are:

PREPARING FOODS AND PLANNING MENUS--Using the Dietary Guidelines, HG 232-8, 32 pp.

MAKING BAG LUNCHES, SNACKS, AND DESSERTS--Using the Dietary Guidelines, HG-232-9, 32 pp.

SHOPPING FOR FOOD AND MAKING MEALS IN MINUTES--Using the Dietary Guidelines, HG-232-10, 36 pp.

EATING BETTER WHEN EATING OUT--Using the Dietary Guidelines, HG-232-11, 20 pp.

The booklets are available for purchase from the Consumer Information Center at prices ranging from $1.50 to $3.00.

Reaching the public. The focus of HNIS' initial campaign efforts is to reach the public with the Dietary Guidelines message through the media and other information multipliers.

- o HNIS will contact the media, encouraging stories and answering questions.

  --Journalists with magazines and newspapers with circulations of 10,000 or more will receive press kits which will include:

    the four new booklets
    feature releases on topics covered in the bulletins
    reproducible graphics and charts
    information about HNIS and its resources

  --Journalists with smaller newspapers will receive:

    the four new booklets
    camera-ready news columns and graphics
    bounceback cards to track story pick-up

- o HNIS will initiate placement for spokespersons on commercial and educational radio and television stations nationwide.

- o HNIS is producing radio and television news features about the campaign and bulletin topics through USDA's Division of Radio and Television.

- o HNIS is writing a series of articles about the campaign and bulletin topics for publication in USDA NEWS.

The outreach is also targeted to the public through professionals in the public and private sector. HNIS will:

- o Alert the public and private sector to opportunities to "ride" print orders at discount prices.

- o Announce availability of publications and other outreach activities in USDA news releases, and in professional journals, newsletters and at meetings.

- o Work cooperatively with the Extension Service to reach the public and professionals through their grassroots network.

Other avenues of promotion include working with the marketing staff of the Government Printing Office and the Consumer Information Center.

We are now informing the professional community of our campaign and are seeking their support and cooperation in helping to educate consumers about the Dietary Guidelines. We welcome the use of our materials, including our "Eating Right...the Dietary Guidelines Way" logo. We look forward to working with others in this effort.

(Additional attachments are held in the committee files.)

DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20250

NOV 15 1983

Honorable Charles Hatcher
Chairman, Committee on Agriculture
Subcommittee on Domestic Marketing,
  Consumer Relations, and Nutrition
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

I again thank you for the opportunity to present the Department of Agriculture's views concerning the National Nutrition Monitoring System and the proposed related legislation.

Enclosed are my responses to the 22 questions asked by members of the Committee. I hope they will further elucidate our activities and plans in carrying out our responsibilities for national nutrition monitoring.

Sincerely,

Ann Chadwick

ANN CHADWICK
Director
Office of the Consumer Advisor

Enclosures

Question 1: The Federal government has been working on a National Nutrition Monitoring System since 1977. It is now 1989. What accomplishments have been made and where can improvements be made?

Answer: The 1981 Implementation Plan for a National Nutrition Monitoring System (NNMS) developed jointly by USDA and DHHS set two goals--better coordination among NNMS components, particularly the surveys of USDA and DHHS, and the development of a system for reporting on the dietary and nutritional status of the U.S. population. The 1987 Joint Operational Plan for NNMS--an update of the 1981 plan--added a third goal: improvement of the research base for nutrition monitoring. We have made substantial progress in all three areas as shown below:

ACCOMPLISHMENTS

(1) Better Coordination Among NNMS Components

o A joint working group reviewed linking variables in USDA and DHHS survey questionnaires. The questionnaires were made identical for nine variables and linkages were made for sixteen more. NNMS provides data for many different purposes. It is not possible to design a single survey that will adequately meet the divergent needs of the two Departments.

o The USDA food-coding system and nutrient data base are being used for surveys of both USDA and DHHS.

o DHHS added the USDA set of food measurement aids to the NHANES set of food models.

o USDA will report results using the same sex/age groupings planned for NHANES III reports.

o The Departments have developed similar documentation formats for data tapes.

o To improve coverage of monitoring activities, USDA and DHHS established the Interagency Committee for Nutrition Monitoring. This Committee has representatives from each of the USDA and DHHS agencies involved in monitoring activities as well as representatives from the Departments of Defense, Commerce, and Labor, and the Veterans Administration.

o A NNMS Directory describing NNMS activities in detail has been published.

o Improved coverage of high-risk groups. The CSFII collected data from two high risk groups--women 19-50 years and their children 1 to 5 years. Low-income samples are included in all USDA surveys.

o Continuous data collection. Initiated in 1985, the CSFII is the first attempt to assess the food intakes of a national sample on a continuous basis ever initiated in this or any other country.

(2) Development of a System for Reporting on Dietary and Nutritional Status of the U.S. Population

o USDA and DHHS have implemented a reporting system that integrates the results of the monitoring system components into common reports. Two reports--in 1986 and 1989--have been published.

o Improved timeliness of reporting of survey data. The first results of the 1985 CSFII were released only 6 months after data collection was completed. ~~We have~~ now completed the release of all of the reports and data tapes from both the 1985 and 1986 surveys. The CSFII--which was reinstated in April 1989, provides annual collection and reporting of data, which is much more useful than decennial surveys alone in helping provide a basis for policy decisions concerning dietary guidance and food assistance programs.

o Work with State and local groups interested in nutrition monitoring has increased. USDA sponsors annually the National Nutrient Data Base Conference at which users of USDA's data on food composition gather to discuss research progress and needs. A one-day session for users of survey data has been added to the annual agenda for this conference.

o Increased sponsorship of indepth analyses of survey data with emphasis on policy relevant issues, including those relating to agriculture, food assistance, and nutrition education. Much of this work is done through competitive cooperative agreements with universities to supplement that done intramurally.

(3) Improvement of the Research Base

o Establishment of a system of priority setting for food composition analyses between the Human Nutrition Information Service and the Nutrition Composition Laboratory of the Agricultural Research Service. Through the Food Consumption Working Group of the Interagency Committee for Nutrition Monitoring other interested Federal agencies, as well as State agencies, are also involved in this process. Also, we are working on improved coordination with all five of the ARS Human Nutrition Research Centers.

o Significant advances in nutrient analyses and the National Nutrient Data Bank. In 1977, reliable food composition data were available to evaluate the intakes of individuals for calories and 14 nutrients. By 1985, reliable data were available for 28 nutrients. By 1990, the data base will include selenium and the individual fatty acids.

o Methodologies for nutrient analysis have been improved. One current example is the initiation of an international collaborative research project on dietary fiber analysis which will greatly enhance the quality of fiber data in the future.

o Survey methodology studies. USDA has undertaken 13 major methodological studies in the past 12 years. These studies were designed to increase the validity and reliability of survey results while minimizing costs. These studies will be documented in a forthcoming publication "USDA Methodological Research for Large-Scale Dietary Intake Surveys, 1975-88," to be published this winter.

o In addition, consistency in dietary recommendations by the government agencies that comprise the NNMS has greatly improved. The Dietary Guidelines for Americans, first published by USDA and DHHS in 1980 and slightly revised and published in 1985, continues to be the centerpiece for Federal dietary guidance for healthy people, i.e., those who have not been diagnosed by a physician as having a specific health problem that indicates a therapeutic diet should be followed. In 1985, USDA formed the Dietary Guidance Working Group. It is composed of representatives of nine USDA Agencies and a representative of DHHS. The charge of this working group is to ensure that all publications or other dietary guidance issued via any means from the Department of Agriculture adhere to the principles of the Dietary Guidelines for Americans. DHHS also has a committee to review dietary guidance and USDA has a representative on that committee. This mechanism has greatly enhanced the Federal government's objective to "speak with one vocie" regarding dietary recommendations.

IMPROVEMENTS NEEDED

We will not attempt to list every aspect of the system where we believe improvements could be made, for no system is perfect. Rather, we will indicate the areas we regard as having the highest priority.

1. Improved coverage of high-risk populations including the elderly.

2. Continued methodological studies designed to improve data validity (e.g., precision of intake estimates, including alcohol) and improve survey efficiency.

3. Continued improvements on the food composition data base.

4. Improved timeliness of NNMS data.

Question 2: Do you feel that it would be appropriate for an agency--such as the Bureau of the Census--to conduct a baseline study of the nutritional status of Americans? Or do you feel that we know the nutritional status of Americans right now?

Answer: We believe that the National Nutrition Monitoring System does provide adequate estimates of the nutritional status of Americans. Two reports, "Nutrition Monitoring in the United States--A Progress Report from the Joint Nutrition Monitoring Committee," published in 1986, and "Nutrition Monitoring--An Update Report on Nutrition Monitoring," published in 1989, utilized the data from the Monitoring System to detail the dietary and nutritional status of the population. With the reinitiation of the CSFII in 1989, we will be able to track dietary status annually.

A number of years ago, we contacted the Bureau of the Census about conducting the USDA food consumption surveys. Because of the complexity of the methodology for collecting data on food use and food intakes, the Bureau of the Census indicated they had neither the personnel nor the expertise to take on this responsibility.

Question 3: Let's say that we know the nutritional status of Americans right now. What do we do with that information? Is that where the Dietary Guidelines for Americans come in?

Answer: The Dietary Guidelines for Americans (USDA and DHHS, 1980 and 1985) are seven principles for a healthful diet. They are based on research showing the relationship between diet and health. Information on the dietary status of Americans lets us and everyone concerned with the health of Americans know how the population is doing in relation to recommendations for a healthful diet. Discrepancies between recommended intakes and actual intakes become the focus for nutrition education and intervention efforts as well as for the Dietary Guidelines themselves. Data from USDA's food consumption surveys identify subgroups in the population whose diets deviate the most from recommended intakes. These are the groups that are most likely to be at nutritional risk and therefore are the groups targeted for special emphasis in nutrition education/intervention efforts. Studies on the factors that influence dietary status are essential to enable targeting nutrition education messages. Such studies include those on meal patterns and eating behavior, food selection patterns, knowledge and attitude about diet and health, barriers to a "good" diet, food expenditure patterns related to diet quality, and social, cultural and economic factors which may influence dietary status. In addition, studies on current intakes in relation to recommendations may raise questions about the recommendations themselves which would help establish a research agenda for the future.

Question 4: Mrs. Chadwick has a unique perspective on this issue as a consumer advisor in both the government and the private sector. From that projection, what is the best way to communicate with the American public on the matter of nutritional well-being. How can diets be improved?

Answer: I was a nutritionist for the food industry from 1975-1983. My responsibilities included helping to determine what consumers want so my employers could meet their needs, and helping the food industry develop appropriate nutrition policy and dietary recommendations consistent with the scientific knowledge that was available at the time.

Prior to 1980, there was significant confusion on the part of consumers and frustration on the part of the food industry that nutrition information from many sources, including the Federal government, often seemed to conflict and was sometimes not very realistic or very useful. The Dietary Guidelines for Americans, first published by USDA and DHHS in 1980, have stood the test of time and have been a major vehicle for helping the Federal government as well as health professionals and the food industry to provide clear, unambiguous recommendations that are realistic and can be adopted by individuals with widely differing food preferences to achieve a nutritious diet.

Consumers need simple, clear dietary guidance that can help them maintain good health while continuing to eat the foods they enjoy. Drastic changes in eating habits can be maintained for short periods of time by people who are highly motivated, but experience indicates that most people cannot adhere to a diet of foods they do not enjoy for long periods of time.

The Dietary Guidelines for Americans and supporting publications, such as USDA's current "Eating Right" campaign, provide clear, easy-to-understand information that helps consumers make trade-offs that may be necessary to eat what they like and still maintain a nutritious dietary pattern. Guidelines must also consider current lifestyles, e.g., constraints on time and frequent meals away from home, if consumers are to follow them with any degree of success. The "Eating Right" publications were developed with the recognition that consumers need help in following the Dietary Guidelines, guidelines must fit their lifestyles, and the messages must be in a format that is easy to understand and apply to individual dietary preferences.

Most healthy Americans can improve their diets by following the Dietary guidelines more closely, and by making small, incremental changes that are realistic for them as individuals. If they need to reduce dietary fat, for example, a realistic way to approach it is to gradually switch from whole milk to lower fat milk to skim milk or to use gradually decreasing amounts of salad dressing while increasing consumption of fiber and nutrient dense fruits, vegetables and whole grain products.

Lower fat foods in each food group should be chosen more often; e.g., lean cuts of red meat and poultry without skin or fat added in cooking should be eaten more frequently and cuts higher in fat should be eaten less frequently.

The most realistic advice for healthy people is still to eat a wide variety of foods in the moderation required to maintain a desirable weight while avoiding too much fat, saturated fat, cholesterol, sugar, sodium and alcohol and eating foods that contain adequate amounts of starch and fiber.

Question 5: Does DHHS have the opportunity to review all of USDA's dietary guidance materials prior to issuance? Does USDA have the opportunity to review all of DHHS' dietary guidance materials prior to issuance?

Answer: Yes, DHHS has the opportunity to review all of USDA's dietary guidance materials prior to issuance. Actually, there are several opportunities. Two points in the review process are formal. All USDA materials that contain any information that might be interpreted as dietary guidance are reviewed by USDA's Dietary Guidance Working Group at the prospectus stage (before work is initiated to avoid duplication of efforts) and at the final draft stage. The Dietary Guidance Working Group, chaired by HNIS, has representation from nine USDA agencies and a liaison from DHHS.

The peer review process is less formalized in that the point at which materials are reviewed and who reviews them is dependent on the materials to be reviewed. HNIS is a strong supporter of the peer review process and all dietary guidance publications are extensively reviewed by peers in other Federal agencies, especially DHHS, academia, and State agencies.

USDA also reviews DHHS materials as requested.

Question 6: Please provide a list of the dietary guidance materials that have been reviewed by the appropriate committees in DHHS and USDA.

Answer: All USDA materials containing any dietary guidance information have been reviewed by USDA's Dietary Guidance Working Group since its formation in January of 1986. A list of such publications is attached. The Working Group, chaired by HNIS, has representatives from nine USDA agencies and a liaison member from DHHS. The Group reviews materials for consistency with Federal nutrition policy. It does not replace the peer review process that occurs during the development of publication. Prior to the establishment of the Dietary Guidance Working Group, HNIS publications on dietary guidance were also extensively peer reviewed during the development process by nutritionists and nutrition educators in universities and the Cooperative Extension Service, other USDA agencies such as the Agricultural Research Service, Extension Service, Food Safety and Inspection Service, Food and Nutrition Service, and other Federal agencies, such as the Food and Drug Administration, National Institutes of Health/National Heart, Lung, and Blood Institute, National Cancer Institute, etc.

Nutritionists in HNIS have served as peer reviewers during development of some publications by the National Heart, Lung, and Blood Institute and National Cancer Institute, such as the publication "Eating for Life" (NIH Publication No. 88-3000).

REVIEWS BY DIETARY GUIDANCE WORKING GROUP

Name	Requested by	Date
Quick and Easy Commodity Cooking	FNS	September 7, 1989
Food and Nutrient Intakes of Pregnant and Lactating Women in the United States	HNIS	August 17, 1989
A Gift of Wise Eating Habits	FSIS	August 17, 1989
Quick and Easy Commodity Cooking	FNS	June 29, 1989
Eight Feature Releases Describing New Dietary Guidelines Bulletins	HNIS	June 21, 1989

Name	Requested by	Date
USDA Statement on the Nutritional Requirements for the National School Lunch Program	FNS	April 25, 1989
Calories and Weight: The USDA Pocket Guide	HNIS	April 21, 1989
A Menu Planning Guide for Child Care Centers, FNS-64	FNS	April 21, 1989
Good Sources of Nutrients	HNIS	March 23, 1989
Nutrition and Aging	FNS	February 1, 1989
Facts About Shell Eggs, Handlewith Care	AMS	December 7, 1988
Good Sources of Nutrients	HNIS	December 7, 1988
Dietary Guidelines Poster	HNIS	November 14, 1988
White Paper on the Implementation of the Dietary Guidelines in the National School Lunch Program	FNS	November 10, 1988
Dietary Guidelines Poster Prospectus	HNIS	October 19, 1988
Supermarket Salad Bars--Cost versus Convenience	HNIS	September 20, 1988
Summary of Dietary Recommendations for Healthy Americans	HNIS	August 15, 1988
Serving Infants in the Child Care Food Program	FNS	July 11, 1988
Summary of Dietary Recommendation for Healthy Americans	HNIS	August 15, 1988
How WIC Helps	FNS	May 20, 1988
Choosing Foods for a Healthy Family	FNS	May 19, 1988

Name	Requested by	Date
Dietary Guidelines and Your Diet: Dietary Guidelines-style Meals in Minutes and Food Shopping in the Dietary Guidelines Style	HNIS	May 19, 1988
Interpretive Materials to Accompany USDA's Dietary Analysis Program for the Personal Computer	HNIS	May 18, 1988
Dietary Guidelines and Your Diet: Brown Bag Lunches	HNIS	April 1, 1988
Dietary Guidelines and Your Diet: Desserts and Snacks	HNIS	April 1, 1988
Principles for Dietary Guidance for the General Public	DGWG	October 30, 1987
Aqua-Topics	NAL	October 15, 1987
Dietary Guidelines and Your Diet: Menu Planning	HNIS	October 15, 1987
Dietary Guidelines and Your Diet: Eating Out	HNIS	October 9, 1987
Dietary Guidelines and Your Diet: Food Preparation	HNIS	September 24, 2987
Dietary Guidelines Poster for Children	FNS	July 13, 1987
Food and You, How to Eat for a Happy Health Body	OGPA	July 2, 1987
Dietary Guidelines Home Economics Teachers' Guide--part of Teaching Kit	HNIS	June 24, 1987
More on Spices	FSIS	June 9, 1987
Factsheet--Food Sources of Fat in Women's Diets, 1985 and 1986	HNIS	June 1, 1987

Name	Requested by	Date
Factsheet--Diets of American Women: How They Relate to Standards	HNIS	June 1, 1987
Osteoporosis--Are you At Risk?	ES	May 12, 1987
Food and Fun Facts--Food: What It Does for You	OGPA	May 8, 1987
Diets and You: How to Eat For a Happy Healthy Body	OGPA	May 8, 1987
Prospectus for Dietary Guidelines Teachers Guide	HNIS	April 23, 1987
Calcium--Food Sources and Costs	HNIS	April 3, 1987
Grandma's Nutrition Rules Make Scientific Sense	DGWG (HNIS)	March 1987
American Diets: How We're Doing; How to do better	DGWG (ARS)	March 1987
Prospectus for HNIS's Vitamin and Mineral Factsheet	HNIS	November 20, 1986
The Calcium Connection	HNIS	October 28, 1986
Sodium and High Blood Pressure	HNIS	October 28, 1986
Alcohol: What Are the Risks	HNIS	October 28, 1986
School Food Service Manual NCI--FNS	FNS	August 21, 1986
FNS--Make Your Food Dollars Count 1986	FNS	June 26, 1986
Fat Machine	FSIS	May 13, 1986
Food and Fitness Flyer	AMS	March 20, 1986

Question 7: What has been done to implement the recommendations from the July 1986 report Nutrition Monitoring in the United States' issued by the Joint Nutrition Monitoring Evaluation Committee and the recommendations from the report National Survey Data on Food Consumption--Uses and Recommendations?

Answer: The following is a summary of activities undertaken by USDA to implement the recommendations of the two reports mentioned above:

A. Recommendations from "Nutrition Monitoring in the United States"

1. Establish a mechanism for learning more about the data needs of users, especially Federal agencies.

Prior to both the NFCS and the CSFII we sent over 300 inquiries to data users in the Federal Government, industry, and academia asking for input on survey design. This is a well established practice that will continue with future surveys. Drafts of the questionnaires as well as the proposed survey design and sample were included for comment and suggestions. In addition, we worked closely with the Food and Nutrition Service (FNS) relative to their data needs for evaluating the food assistance programs. User recommendations were incorporated if possible. For example, the 1989 CSFII includes a food frequency question at the request of the Environmental Protection Agency, food safety questions for USDA's Food Safety and Inspection Service, and diet-health knowledge questions for Food and Drug Administration as well as food assistance questions for FNS.

2. Sponsor periodic conferences related to survey design and data analysis.

With the upcoming release of the NFCS data, we plan to hold one or two workshops on use of the survey data. In addition, a session will be held at the National Nutrient Data Conference in June 1990. As the CSFII and Diet/Health Knowledge Survey (D/HKS) continue, we plan to hold annual conferences not only to assist users but to report on research results. Survey documentation has been increased substantially to aid data users. Guidelines are provided for the use of weights in analyzing HNIS data. Also, appropriate statistical packages are suggested.

3. Increase the availability of nutrition information from Federal surveys.

The Agency has improved its system for announcing the release of new reports and data tapes. The system includes an updated mailing list for notification of new releases, press releases, and announcements in professional journals. In addition, we ask data users to supply us with copies of any published reports or dissertations using survey data. We are planning to make this information available in machine-readable form through National Technical Information Service in the near future. In addition, we announce all new data releases and research results through a Bulletin Board that has been established by the Agency.

4. Establish a listing of data bases, including methods and techniques related to food, nutrition, and health.

The DHHS and USDA recently published "Nutrition Monitoring in the United States--The Directory of Federal Nutrition Monitoring Activities." This directory provides a descriptive summary of current nutrition monitoring activities sponsored by Federal agencies. HNIS also publishes a listing of all NFCS, CSFII, and Nutrient Data Bank releases and published reports. These listings are also disseminated through NTIS.

5. Provide resources for policy-relevant analyses of existing data.

HNIS has and continues to provide resources for policy-relevant analyses of survey data as funding is available. Eight studies were funded to analyze the CSFII data and six studies have been funded to analyze the NFCS data. A description of these studies is attached.

6. Provide adequate and uniform documentation of data files.

HNIS expanded its survey documentation with the 1985 CSFII to provide data users with information needed to facilitate appropriate use and interpretation of survey data. Documentation for the 1987-88 NFCS has again been expanded to include guidelines for the use of weights when analyzing and reporting HNIS survey data as well as appropriate statistical packages. This will enhance the comparability of analyses done by different researchers on the same survey data.

7. Improve comparability of data. Mechanisms should be developed through which information from different data systems can be integrated and results reported in a comparable manner.

Major strides have been taken by the two Departments to make the NHANES, NFCS, and CSFII more comparable. The three surveys will be utilizing the same nutrient data base and food coding system. Sex/age groupings in published reports will be identical. The number of identical questions within the surveys has been increased and where emphasis in one survey is greater (for example, exercise in NHANES and food-assistance program participation in NFCS and CSFII) linking questions have been included.

8. Improve timely publication of data.

HNIS released the first report from the CSFII six months after data collection was completed. Publication of results (report and data tapes) from both the 1985 and the 1986 CSFII were completed in January 1989. With the reinstatement of the CSFII in April 1989, data will become available annually. The agency has initiated a new popular publication for the NFCS and this will be continued with the CSFII and D/HKS. This new publication will consist of a series of graphs and minimal text depicting the principal findings of the surveys.

9. Continue and expand efforts to study the factors that influence food intake and nutritional status, especially among high-risk subgroups.

A number of the indepth extramural studies for CSFII and NFCS funded by HNIS are directed at the factors that influence dietary status (see attachment). A Diet-Health Knowledge Survey is being conducted as a telephone followup to the 1989 Continuing Survey of Food Intakes by Individuals. This survey represents the first time that a nationwide sample will be used to study the relationship between individuals' actual dietary intakes and their knowledge and attitudes about dietary behavior.

10. Improve coverage of minority and low-income populations in activities of the National Nutrition Monitoring System.

The USDA includes a special sample of the low-income population (less than 130 percent of poverty) in all survey activities. However, lack of funding has prevented special surveys of those specific minority groups whose occurrence in nationwide samples is not large enough to permit accurate assessment of dietary status.

11. Evaluate the feasibility of developing indicators for monitoring changes in food consumption and nutritional status.

Lack of resources has prevented the Department from initiating research to develop a set of nutrition indicators that would accurately monitor changes in food consumption and nutritional status.

12. Increase research to improve methods for assessing dietary and nutritional status.

HNIS continues to expand the number of nutrients included and to improve the quality of data in the National Nutrient Data Bank. The nutrient data base developed for use with the surveys was expanded from 14 nutrients and dietary components in 1977 to 28 in 1985. By 1990, the survey nutrient data base will include selenium and the individual fatty acids, dietary components hypothesized to be related to disease. With the increased interest in fiber in the diet, HNIS has initiated an international collaborative research project on dietary fiber analysis. Evaluation of this work will greatly enhance the quality of fiber data in the future. HNIS and the Nutrient Composition Laboratory of ARS have a well established system of priority setting with respect to analyses of food composition data. Standard reference materials are utilized in selecting contractors and in monitoring their work.

13. Provide adequate resources for the National Nutrition Monitoring System to implement these recommendations and for the Committee, which is charged with interpreting the data collected by this system and also with assessing the need for improvements in the system.

A contract was signed with the Life Sciences Research Office (LSRO) for the development of the second report "Nutritional Monitoring in the United States--An Update Report on Nutrition Monitoring." The Committee was increased to nine members as compared to four for the first report and LSRO provided extensive staff support. In addition, a number of consultants were utilized.

14. Identify potential sources of complementary data for the National Nutrition Monitoring System.

The publication of the report "Nutrition Monitoring in the United States: The Directory of Federal Nutrition Monitoring Activities" will greatly facilitate this.

B. Recommendations from "National Survey Data on Food Consumption--Uses and Recommendations." The 34 specific recommendations of the NAS/FNB report are summarized in eight general recommendations as follows:

1. Redesign individual intake surveys to achieve continuous data collection, processing, and reporting.

USDA initiated the Continuing Survey of Food Intakes by Individuals (CSFII) in 1985. This is the first nationwide dietary intake survey designed to be conducted annually in this country. Collection for the first two years included women age 19 to 50 and their children age 1 to 5--two groups considered to be at high risk. After a 2-year pause to field the decennial Nationwide Food Consumption Survey 1987-88 and to evaluate CSFII methodology, the CSFII began again in April 1989. The CSFII will be conducted annually with data collected from all sex/age groups. Annual reporting of data will incorporate a moving-average approach as recommended in the NAS/FNB report.

2. Continue to collect at least 3 days of intake data in the decennial survey and do repeated surveying of individuals over a year in the CSFII; continue extramural studies aimed at improving data collection methods.

USDA collected 3-day intakes in the decennial survey of 1987-88. In the CSFII 1985 and 1986, individuals were asked to provide 6 separate days of intake over a period of 1 year (panel approach). An evaluation of the panel approach indicated a number of drawbacks including high cost and a drop in the response rate between the 1st and the 6th days of data collection. Therefore, the CSFII planned for 1989 through 1996 has been redesigned to eliminate the panel approach and to include the collection of dietary data on 3 consecutive days as in NFCS 1987-88.

HNIS has an active program of methodology research. Since 1975, 12 major studies of survey methods have been completed by investigators at universities or private research firms. These studies will be documented in a forthcoming publication "USDA Methodological Research for Large-Scale Dietary Intake Surveys, 1975-88." The report will include information on changes made in survey methodology that result from these studies.

3. Standardize core elements of USDA and DHHS dietary intake surveys to achieve better comparability.

The two Departments established two working groups to standardize, where possible, the 24-hour recall and population descriptors. Where complete standardization is not possible, core links provide a crosswalk. In addition, USDA has prepared a food coding system and food composition data base for use by both Departments in the current and future dietary intake surveys.

4. Develop descriptors that allow linkage or crosswalks with other Federal surveys.

Population and socioeconomic descriptors such as income, education, employment, etc. that allow crosswalks are included in current surveys.

5. Set up interagency working groups to discuss improved techniques for obtaining data on dietary supplements, discretionary dietary components (sugar, fat, salt, and alcohol), and energy intake and expenditure.

USDA is working with DHHS on these questions, keeping in mind the increase in respondent burden that might be involved. The CSFII includes questions on discretionary salt and fat usage and probes in subjective ways for complete dietary disclosure, including alcoholic beverages.

6. Expand and improve data on the composition of foods with priority on core foods; evaluate and improve methods for food analysis; provide missing data through cooperation with other agencies; consider for the long term a plan for including information on additives, toxicants, colorings, flavorings, and inadvertent food components.

The USDA periodically reviews methods used for food analysis and publishes information on data reliability including the number of analytical observations of specific foods. USDA has stepped up its use of extramural contracts and its cooperation with the Agricultural Research Service and other agencies such as the National Institutes of Health and the Food and Drug Administration to fill data gaps and to develop better procedures for direct analysis of specific foods. Inclusion of additives, etc., in the USDA data bank would require considerable expansion of resources and is not planned for the near future.

7. Develop educational strategies for users of food consumption and food composition data.

USDA plans to provide more detailed information to users on the data tapes and in survey reports. In addition, USDA has taken steps to initiate a system of postrelease information to provide better feedback between data collectors and data users. We also plan to have annual data users conferences as well as sessions at the Nutrient Data Bank Conferences.

8. Improve data storage techniques to protect against physical deterioration.

USDA is following recommendations of the National Archives in handling survey data sets. Backup data sets are stored in several locations.

Attachment to Question 7

CSFII Analyses

Methodological Issues in Food Consumption Surveys

Principal Investigator: Dr. Cheryl Ritenbaugh
University of Arizona

Using CSFII 1985 samples, research is underway to determine components of within-individual variation in nutrient intakes associated with personal, household, and demographic attributes as well as survey method. Findings will help in design of surveys such as in determining the number of days of dietary records needed to estimate usual intake of a nutrient within a given confidence interval for subsets for the population.

Dietary Status and Eating Patterns

Principal Investigator: Dr. Pamela S. Haines
University of North Carolina

This study uses data from the CSFII 1985 and the NFCS 1977-78 to examine the relationship between dietary status and eating patterns. Results will help in assessing the role of lifestyle changes including increases in females' employment, childlessness, and childbearing at older ages on dietary status so that diet and health intervention can be appropriately defined and targeted.

Nutritional Quality of Diets of Population Groups in the USDA CSFII 1985

Principal Investigator: Dr. Carol T. Windham
Utah State University

Multiple regression and cluster analyses are being used to identify the personal, demographic, and household factors associated with the intakes of nutrients and other food components, using data from CSFII 1985.

Determinants of Food Group Consumption Patterns

Principal Investigator: Dr. Barry Popkin
University of North Carolina

Using data from the CSFII 1985 core sample and the 1977-78 NFCS for women 19-50, this study examines associations between personal, household, and demographic factors and reported use of foods.

Health Related Factors Affecting Dietary Status

Principal Investigator: Dr. Gail Harrison
University of Arizona

Using the CSFII 1985 core of sample, women 19-50, nutrient and food intake data are being analyzed to determine the underlying multivariate structure using the principal component approach.

Attachment (con't)

Relationship of Food Groups and Dietary Iary Intake

Principal Investigator: Dr. Frances Thompson
Cornell University

Using data from women who completed 4 days of diet records in the CSFII 1985, the relationships between consumption of groups of foods and intakes of fat, saturated fatty acids, cholesterol, fiber, sodium, vitamin A and vitamin C are being studied. The results will be used to develop food frequency instruments which can be used to classify individuals by intake of these nutrients and food components of interest to the nutrition and health community.

Changing Household Organization and Structure of Demand for Food in the U.S.

Principal Investigator: Dr. Ellen Bryant
Mississippi State University

Using 4-day data from the 1985 CSFII, researchers are examining associations between personal, demographic and household factors (particularly household structure), and eating patterns. The effects of these factors on food use and nutrient intake will be assessed using a structural equation model.

Methodological Factors Affecting Measurement of Dietary Status

Principal Investigator: Dr. Stanley R. Johnson
Mississippi State University

This study, using CSFII data, will provide mechanisms for assessing alternative indicators of dietary status. For six nutrients, distributions estimating usual intake are being developed using sophisticated statistical techniques involving data transformations and simulation models.

Analysis of 1987 NFCS Household Data

The Importance of Socioeconomic, Demographic, and Personal Factors on Nutrient Levels of U.S. Households

Principal-Investigator: Dr. Vicki McCracken
Washington State University

Changes in the structure of the U.S. population and composition of the food supply are thought to be affecting households' food consumption and dietary status. This study will use the household portion of NFCS 1987 to develop behavioral models to identify how socioeconomic, demographic, and personal factors as well as food product attributes affect the levels of nutrients in households. The results will also be used to forecast future behavioral patterns under alternative scenarios.

Attachment (con't)

The Effects of Economic, Demographic, and Food Choice Variables on Household Nutrient Levels in the United States

Principal Investigator: Dr. Suzanne Murphy
University of California - Berkeley

The study will examine the effect of differing economic factors, demographic variables, and food group choices on the nutrient levels of households participating in the NFCS 1987 household survey. An economic model will be used to determine nutrient shadow prices that are specific to the survey, region, and level of urbanization. These prices, along with reported food group intakes and variety of nondietary variables, will be used to derive parameter estimates for a system of demand equations with a separate equation for each nutrient in the data set. Composite nutrient variables also will be developed for each nutrient in the data set. Composite nutrient variables also will be derived to categorize households and the effects of various economic, demographic, and food choice variables on this classification will be assessed.

An Analysis of Variations in Food Consumption Across Household Types and Over Time

Principal Investigator: Dr. Jennifer L. Gerner
Cornell University

The study will examine the variation in food consumption across different types of households, as well as the variation over time among households of a given type. Using data from the NFCS 1977-78 and NFCS 1987-88, households will be divided into mutually exclusive household types, using variables such as race, ethnicity, and household composition. These results will allow prediction of the variation in food consumption across household types, holding economic factors constant. This will allow the extent of the variation due to different preferences, versus that due to differing economic condition, to be predicted.

Analysis of 1987 NFCS Individual Intake Data

Prediction of High-Risk Dietary Patterns

Principle Investigator: Dr. Gail Harrison
University of Arizona

The purpose of the proposed study is to investigate, in the data derived from the individual portion of the Nationwide Food Consumption Survey 1987-88 (NFCS-87), the contexts in which specific dietary risk patterns are most likely to occur in individuals. Separate analyses will be done on the basic sample and the low-income sample. The specific dietary patterns to be explored are those which may put the individual at increased risk of inadequate nutrient intake or (ultimately) of diet-related heart disease, namely:

a) nutrient intakes substantially below the Recommended Dietary Allowance (NAS, 1980).
b) high intake of total dietary fat as a percent of energy intake.

The context will be defined in terms of three sets of variables which are hypothesized to be related in specific ways to risk of poor diet as defined above. These sets of variables relate to: 1) health-conscious lifestyle; 2) factors which affect energy intake; and 3) household-level resources (financial, dietary and human).

Dietary Status and Eating Patterns

Principle Investigator: Dr. Pamela Haines
University of North
Carolina-Chapel Hill

The purpose of this research is to improve understanding of the relationship between patterns of eating and several alternate measures of dietary status. Emphasis will be on the source of food--at home or away from home. The first portion of the analysis will focus on cross-sectional analysis with the 1987-88 NFCS. The second portion of the project will extend work begun earlier on eating pattern trends and their impact using CSFII data.

The Effect of Demographic, Health, Economic, and Food Choice Variables on Individual Nutritional Adequacy in the United States

Principle Investigator: Dr. Fernando E. Viteri
University of California-Berkeley

This study will examine the effect of differing demographic, health, and economic factors, nutrition program participation, and food group choices of individuals and their households on the nutrient intakes of individuals participating in NFCS 1977-78 and NFCS 1987-88. A consumer behavior model will be used with previously determined nutrient shadow prices. These prices, along with food group intakes and variety of nondietary variables, will be used to derive parameter estimates for a system of demand equations with a separate equation for each nutrient in the data set. Marginal propensities to consume and demand elasticities will be estimated for the nutrients being considered. In addition, composite nutrient intake variables will be used to categorize individuals based on the nutrient adequacy of their diets. The effects of the various economic, health, food program participation, demographic, and food choice variables on this classification will be assessed.

Question 8: Please explain in detail how USDA food consumption data were used by EPA and NRDC in their estimates of Alar residues and to what extent differences in their estimates reflected discrepancies in the surveys?

Answer: In order to determine the exposure of an individual to pesticide residues, two facts must be known: 1) the residue level of each chemical of interest in each food item consumed, and 2) the amount of each food item consumed by the individual. The USDA nationwide surveys provide information on intakes by individuals of specific food items. Data on mean intakes or on intakes at a specified level of consumption--the 95th percentile, for example, can be provided by sex/age group or by other demographic characteristics. For example, it would be possible to provide intake data for toddlers living in households below 130 percent of poverty in the South.

Both the Environmental Protection Agency (EPA) and the Natural Resources Defense Council (NRDC) used data from the USDA surveys to estimate the intakes of specific food items by individuals. However, EPA used data collected in 1977-78 for individuals of all ages while NRDC used data collected in 1985 for women ages 22 to 30 and children ages 1 to 5.

Since EPA bases tolerance levels for pesticides on raw agricultural products rather than on foods as consumed, EPA converted USDA survey data into raw agricultural commodity equivalents (RACs). To accomplish this, EPA hired a private research company to convert the over 4,000 food items reported in the 1977-78 survey into approximately 300 RACs. This was done by hand, at considerable cost in time and funding. For this reason, EPA elected not to update their food-consumption data with 1985 information, which would have required reanalyzing the data set for new foods and changes in old foods, but rather to wait for data from the 1987-88 Nationwide Food Consumption Survey to become available.

The NRDC, in their report "Intolerable Risk: Pesticides in Our Children's Food," stated that they used the EPA data bases and the EPA procedure to make the conversions from foods as eaten to RACs. However, it is not known how they handled the new foods that had come onto the market since 1978 or changes in existing foods.

They survey methodology was essentially the same in the two years and did not affect the estimates by EPA and NRDC. The differences in their exposure estimates are due to two factors: 1) real changes in consumption of processed-apple products between 1977-78 and 1985, and 2) differences on the methods used by EPA and NRDC to convert from foods as eaten to RACs.

In order to assure that such discrepancies do not recur, the Human Nutrition Information Service (HNIS) is bringing the process of converting from foods as eaten to RACs under our control; thus, all users will have available a common data set. HNIS is in the final stages of developing a Food Grouping System (FGS) which will translate intake of food as eaten to the equivalent weight of agriculture commodities. (See response to Question 9 for additional information.) When completed FGS will provide a well documented, consistent data base for estimating raw agriculture commodities (RACS) for use in estimating residue exposures. The needs of other Federal agencies, such as EPA and FDA, as well as those of USDA are being considered in development of the system.

Question 9: Will EPA get more current food consumption data from USDA in the future to estimate pesticide residues and will that data be kept current?

Answer: The EPA will be provided the 1987-88 NFCS data. In addition, the USDA's Continuing Survey of Food Intakes by Individuals (CSFII) is being conducted on an annual basis. Beginning in 1991, EPA will have access to these annual data for keeping its estimates current. At EPA's request, the Department has added a series of food frequency questions to the CSFII.

HNIS is in the final stages of developing, in cooperation with EPA, a Food Grouping System (FGS) which will translate intake of food as eaten in HNIS' surveys to the equivalent weight of agricultural commodities consumed by individuals. Development of this system will be essential to assessments of potential residue exposure. The FGS is intended to be a fast, flexible computerized system which will meet the needs of HNIS, other USDA agencies, and other Federal agencies such as EPA and FDA. Two unique features of the system are "mixture" files which allow complete separation of all foods eaten into their component parts and "descriptor" files which allow easy and flexible regrouping of food components. The FGS allows for the easy conversion of intake of one form of food to another (e.g., bread to flour to wheat) and the tracking of intake for individuals identified by various population characteristics (sex, age, race, etc.). Work on the data files to meet HNIS' needs is nearly complete. Additional work is required to meet the needs of other agencies. A system for managing and interrelating the large and complex data bases is in development.

Question 10: Please provide examples of methodological changes USDA has made in the Nationwide Food Consumption Survey in response to extramural research or review.

Answer: HNIS survey methodology was reviewed by a special committee of the National Academy of Sciences. A summary of the NAS recommendations and the HNIS response is included in Question 7.

In addition, HNIS has an active program of methodology research. Since 1975, 12 major studies of survey methods have been completed by investigators at universities or private research firms. These studies will be documented in a forthcoming publication "USDA Methodological Research for Large-Sacle Dietary Intake Surveys, 1975-88." The report will include information on where survey methodology was shown to be appropriate and where changes were needed. A summary of changes made in survey methodology follows:

- A 1-day recall method used in the 1965 survey was changed to a 3-day recall/record method in 1977-78 following completion of a study that showed that collection of 3 consecutive days of dietary intake data from each individual in sample households was a feasible approach for obtaining information about less frequently eaten foods and about day-to-day variation in food and nutrient intakes by individuals.
- Advance notice about surveys has been given to sample households following completion of a study that indicated this procedure would improve response rates.
- A study conducted prior to initiating the CSFII found that if the first day of intake data was collected in an in-person interview, the collection of subsequent days of intake data by telephone interview was a feasible approach. The same study found that mail survey approaches were unsuitable for national food consumption surveys.
- Probing by interviewers on often "forgotten" items in the form of a checklist was added to the CSFII and NFCS 1987-88 as a result of a study that showed that this procedure would improve data quality.
- A review of CSFII methodology found that panel surveys in which respondents were asked to provide six 1-day dietary recalls during one year as an indicator of "usual" intake had unacceptably high attrition rates throughout the year. Consequently, the CSFII methodology for 1989-1996 has been revised to drop the panel approach in favor of a 3-day recall/record.
- Collection of 3 days of intake was found to be less costly in time and funds if the days were consecutive rather than widely separated. Therefore the panel approach in the CSFII 1985/86 has been changed to include 3 consecutive days of dietary intakes.

Question 11: Please describe the scope of outside review that USDA conducted in relationship to the "Eating Right" campaign.

Answer: HNIS has initiated a major new educational outreach entitled "Eating Right--the Dietary Guidelines Way". The campaign is designed to increase awareness of the Dietary Guidelines for Americans and to help consumers implement the Guidelines in their daily food choices. The major component of the campaign to date has been the release of four new nutrition education bulletins on Preparing Foods and Planning Menus, Making Bag Lunches, Snacks, and Desserts, Shopping for Food and Making Meals in Minutes, and Eating Better When Eating Out. These bulletins have been sent as part of a press kit containing news features, graphics, and background information to major newspapers, magazines, and other information multipliers. Further outreach using the informational content on the bulletins is planned for radio, television, and smaller newspapers.

The content for the bulletins was developed primarily by HNIS' staff of approximately seven nutrition education specialists. The information is based on research on food consumption, food composition, and communication conducted by HNIS and others. Format and content features were planned based on results of qualitative communication research using focus groups of adult consumers representing the target audience of household food managers. Preparation of manuscripts and review and clearance within HNIS, including development and testing of recipes took approximately 1-1/2 years.

The peer review process included eight agencies within USDA and the interagency group that reviews dietary guidance materials. Outside peer reviewers included representatives of the Cooperative State Extension System, nutritionists in several universities, the U.S. Office of Consumer Affairs, several agencies of DHHS, including the National Heart, Lung, and Blood Institute, the Division of Maternal and Child Health, the Food and Drug Administration, and the Office of Disease Prevention and Health Promotion. Two trade organizations, the National Restaurant Association and the Food Marketing Institute, reviewed manuscripts in which HNIS had used data from surveys conducted by these organizations.

The design and layout of the bulletins, including photography and graphics were developed under contract. The process included evaluation by focus groups and by similar evaluation techniques with the target audience. This work took about 14 months.

Question 12: Please provide a list of committee members, indicating those not affiliated with the Federal government, of all standing advisory committees of the USDA in relation to nutrition monitoring, nutrition research, food consumption data, and dietary guidance.

In the following list, a single asterisk designates a non-USDA Federal employee and a double asterisk designates a person not affiliated with the Federal Government.

o Cooperative Extension Service/ Extension Service/Human Nutrition Information Service Consulting Group

Nancy B. Leidenfrost, USDA, Extension Service
Wells Willis, USDA, Extension Service
Carole A. Davis, USDA, Human Nutrition Information Service
Susan O. Welsh, USDA, Human Nutrition Information Service

** Jean Ann Anliker, University of Connecticut
** Audrey Burkart, Rutgers University
** Mary Clarke, Kansas State University
** Suzanne Fundingsland, North Dakota State University
** Betty Greer, Tennessee State University
** Alice Hunt, Texas A & M University
** Shirley O'Brien, University of Arizona
** Alma Saddam, Ohio State University
** Marilyn Swanson, University of Idaho
** Helene Swenerton, University of California
** Doris Tichenor, University of Florida
** Nadine Tope, North Carolina State University
** Alice Wright, University of Vermont

o USDA/DHHS Nutrition Education Committee for Maternal and Child Nutrition Programs

Brenda Lisi, USDA, Food and Nutrition Service
Doris Dvorscak, USDA, Food and Nutrition Service
Carole Davis, USDA, Human Nutrition Information Service
Wells Willis, USDA, Extension Service
Jim Krebs-Smith, USDA, National Agricultural Library
* Laura M. Kruse, USDHHS, Bureau of Maternal and Child Health and Resources Development
* Yvonne Jackson, USDHHS, Indian Health Service
* Darla Danford, USDHHS, National Institutes of Health

o Ad Hoc Committee on Health Promotion through the Schools

Carole A. Davis, USDA, Human Nutrition Information Service
Jim Krebs-Smith, USDA, National Agricultural Library
Martha Poolton, USDA, Food and Nutrition Service
* JanaLee Sponberg, Department of Defense
* Kimmon Richards, Department of Education
* Debbie Rudy, Department of Education
* Alan Schmeider, Department of Education
* James F. Coyle, Federal Emergency Management Agency
* Barbara Allen-Hagen, Department of Justice
* Donni Hassler, Department of Justice
* Ronald Trethric, Department of Justice
* AnnBlankin, USDHHS, Alcohol, Drug Abuse, and Mental Health Administration
* Bob Denniston, USDHHS, Alcohol, Drug Abuse, and Mental Health Administration
* Rose Kittrell, USDHHS, Alcohol, Drug Abuse, and Mental Health Administration
* Mel Segal, USDHHS, Alcohol, Drug Abuse, and Mental Health Administration
* Ruth Sanchez-Way, USDHHS, Alcohol, Drug Abuse, and Mental Health Administration
* Jack Jones, USDHHS, Centers for Disease Control
* Lloyd Kolbe, USDHHS, Centers for Disease Control
* Margaret Tolbert, USDHHS, Food and Drug Administration
* Carol Vetter, USDHHS, Food and Drug Administration
* Craig Vanderwagen, USDHHS, Indian Health Service
* George Brenneman, USDHHS, Indian Health Service
* Stephanie Dort Bryn, USDHHS, Bureau of Maternal and Child Health and Resources Development
* JoAnn Gephart, USDHHS, Bureau of Maternal and Child Health and Resources Development
* Laura M. Kruse, USDHHS, Bureau of Maternal and Child Health and Resources Development
* Helen Howerton, USDHHS, Office of Human Development Services
* Katherine Armstrong, USDHHS, Office of Disease Prevention and Health Promotion
* Gary Giovino, USDHHS, Office on Smoking and Health
* Tom Hensley, USDHHS, Office on Smoking and Health
* John Pierce, USDHHS, Office on Smoking and Health
* Chris Spain, USDHHS, President's Council on Physical Fitness and Sports
* Michael Anderson, USDHHS, National Institutes of Health
* Leslie Gray, USDHHS, National Institutes of Health
* Alice Horowitz, USDHHS, National Institutes of Health
* Christine Krutzch, USDHHS, National Institutes of Health

* Jeffrey McKenna, USDHHS, National Institutes of Health
* Barry Portnoy, USDHHS, National Institutes of Health
* Elaine Stone, USDHHS, National Institutes of Health
* Marilena Amoni, Department of Transportation
* Michael F. Smith, Department of Transportation
* Rita S. Weiss, Department of Transportation
* Joan White Quinlan, Department of Transportation

o DIETARY GUIDANCE WORKING GROUP

Susan Welsh, USDA, Human Nutrition Information Service
Gerald Combs, USDA, Agricultural Research Service
Elizabeth Crosby, USDA, Agricultural Marketing Service
Judith J. Putnam, USDA, Economic Research Service
Wells Willis, USDA, Extension Service
Patricia Daniels, USDA, Food and Nutrition Service
Cheryl Wade, USDA, Food Safety and Inspection Service
Carole Davis, USDA, Human Nutrition Information Service
Sally Katt, USDA, Office of Governmental and Public Affairs
Jim Krebs-Smith, USDA, National Agricultural Library
* Elena Carbone Britt, USDHHS, Office of Disease Prevention and Health Promotion

o Experiment Station Committee on Organization and Policy - Subcommittee on Organization and Policy

** Gerald Combs, USDA, Agricultural Research Service
** George Mountney, USDA, Cooperative State Research Service

** Carolyn D. Berdanier, University of Georgia
** Robert J. Cousins, University of Florida
** James E. Halpin, Clemson University
** Kirvin L. Knox, The University of Connecticut
** Chung Ja Lee, Kentucky State University
** Bernestine McGee, Southern University
** John A. Milner, Pennsylvania State University
** Madeleine E. Mitchell, Washington State University
** A. Garth Rand, University of Rhode Island
** Robert Rucker, University of California-Davis
** John A. Story, Purdue University

o Nutrition Education Task Force

James Heimbach, USDA, Human Nutrition Information Service
Susan Welsh, USDA, Human Nutrition Information Service
Nina Adler, USDA, Food Safety and Inspection Service
Laura Fox, USDA, Food Safety and Inspection Service
Sally Jones, USDA, Food Safety and Inspection Service
Karen Stuck, USDA, Food Safety and Inspection Service
* Mary Wallace, USDHHS, Food and Drug Administration
* David Wolfson, USDHHS, Food and Drug Administration
* Elizabeth Tuckermanty, USDHHS, National Cancer Institute
* Marilyn Stephenson, USDHHS, Food and Drug Administration
* William M. Rados, USDHHS, Food and Drug Administration
* Jeff Nesbit, USDHHS, Food and Drug Administration
* Alan Levy, USDHHS, Food and Drug Administration
* James Carroll, USDHHS, Food and Drug Administration
* James Cleeman, USDHHS, National Heart, Lung and Blood Institute
* Mary Ann Danello, USDHHS, Food and Drug Administration
* Karen Donato, USDHHS, National Heart, Lung and Blood Association
* Allan Forbes, USDHHS, Food and Drug Administration
* Nathaniel Geary, USDHHS, Food and Drug Administration
* Theresa Hoog, USDHHS, Food and Drug Administration
** Elaine Auld, International Food Information Council
** Patti R. Blumer, The American Dietetic Association
** Susan Borra, Food Marketing Institute
** Roger Coleman, National Food Processors Association
** Zoe Coulson, Campbell Soup Company
** Janet Dudek, National Food Processors Association
** Dagmar Farr, Food Marketing Institute
** Mary Ellen Fise, Consumers Federation of America
** Carol Fletcher, Grocery Manufacturers of America
** Sherwin Gardner, Grocery Manufacturers of America
** Linda Golodner, National Consumers League
** Richard Hanneman, Salt Institute
** Donna Higgins, Del Monte Corporation
** Hilarie Hoting, American Meat Institute
** Jane Hurley, Center for Science in the Public Interest
** Karen Johnson, Borden, Inc.
** Bonnie Liebman, Center for Science in the Public Interest
** Patty Morris, Public Voice

** Jeff Nedelman, Grocery Manufacturers of America
** Louis V. Priebe, Salt Institute
** Claire Regan, National Restaurant Association
** Kit Searight, Dole Processed Foods Company
** Kenneth Sevcik, Fairbault Canning Company
** JoAnn Shurpit, Libby, McNeill and Libby
** Katherine Smith, The Quaker Oats Company
** Katherine Tallmadge, Consultant Nutritionist
** Toni Trinchese, Beatrice/Hunt Wesson Foods, Inc.

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** Melvin E. Walter, Fort Valley State College
** Leodrey Williams, Southern University and A&M College
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** Lark P. Carter, California Polytechnic State University
** Douglas M. Treadway, Southwest State University
R. Dean Plowman, USDA, Agricultural Research Service
Joseph H. Howard, USDA, National Agricultural Library
Jerry A. Sesco, USDA, Forest Service
John E. Lee, USDA, Economic Research Service
** Norman R. Collins, The Ford Foundation
** Crete B. Harvey, Harvey Arabian Farm
** Richard H. Forsythe, Campbell Institute for Research and Technology
Myron D. Johnsrud, USDA, Extension Service
John P. Jordan, USDA, Cooperative State Research Service
Joan S. Wallace, USDA, Office of International Cooperation and Development
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** Charles S. Lieber, Brox VA Hospital
** John A. Milner, University of Illionis

** Rebecca Mullis, University of Minnesota
** Barbara Schneeman, University of California
Betty B. Peterkin, USDA, Human Nutrition Information Service (Executive Secretary)
Linda D. Meyers, USDHHS, Office of Disease Prevention and Health Promotion (Executive Secretary)

Question 13: How frequently has the Interagency Committee for Nutrition Monitoring met since it was established? What specific recommendations or outcomes have resulted from each of the Interagency Committee's work groups -- survey complementary, information dissemination and exchange, and food composition data?

Answer: The ICNM alternates bimonthly meetings with the Interagency Committee for Human Nutrition Research; it thus meets every four months. There had been three meetings prior to September 21, 1989; a fourth was held on October 31.

The ICNM has released the Directory of Federal Nutrition Monitoring Activities and Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring. The food composition working group has identified and prioritized food composition needs for nutrition monitoring, set a schedule to address these needs, and begun work on the top priority issues. Issues for initial consideration include: establish criteria for evaluating the quality of the food composition database for nutrients currently important in nutrition monitoring, and establish criteria for developing, documenting, and using a food composition database for trend analysis. Additional priority issues include improving the documentation of the database, identifying foods for which more information is needed, and developing criteria for estimating values for which there are no analytical data.

The information dissemination and exchange working group has identified a variety of areas for projects and prioritized the top three for beginning work. These are development of a core set of nutrition indicators for monitoring progress toward meeting the Year 2000 Nutrition Objectives; holding a conference to train users/potential users on the availability, interpretation, and practical use of NNMS data and other data available at the national/state-level that can be used with NNMS data to assess nutritional status; and develop a periodic newsletter or column to be submitted to professional journals featuring current NNMS publications and activities, as well as conferences and research articles featuring NNMS data.

Question 14: The summary recommendations of the July, 1989 report on Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring completed for USDA and DHHS by the Federation of American Societies for Experimental Biology (FASEB) indicates, "Both USDA and DHHS have developed plans for survey activities, to a large extent, through 1995 --"

Please describe those plans indicating: (1) the recommendations incorporated from the 1986 Progress Report from the Joint Nutrition Monitoring Evaluation Committee; (2) the comparability between USDA and DHHS surveys regarding nutrient composition data bases; (3) common sociodemographic descriptions; and (4) the capability for linking survey results.

Answer: USDA survey activities include the Continuing Survey of Food Intakes by Individuals (CSFII) which will be conducted annually 1989-95. The CSFII was initiated in 1985 following recommendations from Congress and from the National Academy of Sciences for continuous data on dietary status. The survey has been designed to support moving-average reporting as a cost-effective means of providing trend information in a timely manner. The moving-average approach will be used to provide annual estimates of 3 days of dietary intakes for all sex/age groups. The CSFII has been designed also to accommodate modules from other agencies with concerns relative to nutrition monitoring. A cooperative effort among HNIS, USDA's Food Safety and Inspection Service, and DHHS's Food and Drug Administration was established to conduct a survey on consumer attitudes and knowledge on diet/health issues as a followup to the 1989 CSFII. This project represents the first time that a nationwide sample will be used to study the relationship between individuals' actual dietary intakes and their knowledge and attitudes about dietary behavior.

The CSFII is responsive to the concerns in items 1-4 above:

(1) The answer to Question 7 provides a discussion of USDA activities related to recommendations made in the 1986 report from the Joint Nutrition Monitoring Evaluation Committee.

(2) Both the CSFII and the NHANES III will use the USDA food-coding system and nutrient data base to convert food intakes into nutrient intakes.

(3) The USDA and DHHS surveys currently have many common descriptors. These include: education, ethnic identification, urbanization, sex, age, pregnancy status, height, self evaluation of general health status, race, employment status, occupation, weight, and food program participation.

(4) Linking of the surveys of the two Departments can be done through the descriptors above. In cases where emphasis in one survey is greater (exercise in NHANES and food assistance program participation in NFCS) linking questions have been included.

Question 15: The report by FASEB also indicates some of the nutrition monitoring data could not be used or interpreted by the Panel because they were "reluctant to use some of the data in which response was less than 50 percent."

a. What was the response rate of the 1978 and 1988 USDA Nationwide Food Consumption Surveys?

Answer: For the Nationwide Food Consumption Survey 1977-78, household questionnaires were completed for about 72 percent of the households contacted. In the participating households, 94 percent of the eligible individuals completed the first-day dietary report, and 85 percent completed all three days of the dietary reports.

Response rates for the first-day dietary report in the 1985 CSFII were 71% (basic sample) and 88% (low-income sample). Comparable figures for the 1986 CSFII were 79% and 88%. Response rates for all 6 waves of the CSFII were considerably lower. As a result, the 1989 CSFII has been redesigned to omit the panel approach of the 1985 and 1986 surveys.

We do not yet have final information on the response rates for NFCS 1987-88 although we know that they are much lower than previous surveys and much lower than we are comfortable with. Several aspects of the NFCS contributed to the low response rates. Conducting the household and individual components of the survey together created excessive respondent burden. Also, we attempted to collect data for the household component using laptop computers. Many of the better, more experienced interviewers were not comfortable with this new technology and dropped out. This meant we needed to retrain interviewers throughout the survey.

Current indications from the 1989 CSFII are that it will have much higher response rates than those in the 1978-88 NFCS because we have eliminated the two major problems in the NFCS 1987-88.

b. Do you analyze nutrition monitoring data even if the response rate is less than 50 percent? Please explain.

Answer: The use of survey data with very low response rates will depend on results of nonresponse analyses. One type of nonresponse bias analysis which HNIS has used in the past and will use with data from NFCS 1987-88 involves comparisons of sample demographics with those of the general population as reported by the Census Bureau (primarily from the Current Population Survey). This involves comparing sample and Census distributions of households and individuals across various levels of demographic characteristics of interest. In this analysis, Census proportions are compared with confidence intervals around corresponding proportions of HNIS samples.

A second type of analysis used by HNIS involves evaluation of data from a followup survey of nonrespondents. Here, nonrespondents to the original survey are requested to provide a small amount of demographic information a short time after the survey. The resulting data are compared with corresponding data from survey respondents.

In past surveys, both of these analyses have shown good agreement between HNIS samples and the general population and between HNIS sample respondents and those nonrespondents willing to participate in the followup survey. This gives us little reason to doubt the generalizability of ou the general public.

Aside from analyzing the impact of nonresponse, HNIS has used and will continue to use, weighting factors to help adjust for any effects of nonresponse. In the past, these weighting factors were based on geographic location and level of urbanization of nonrespondents. In NFCS 1987-88, a more sophisticated "post-stratification" procedure based on Census data and involving a larger number of demographic characteristics will be employed. The expected result is an even better agreement between the weighted NFCS sample and Census data than that seen in the past. The Statistical Department at Iowa State University is assisting the Agency in the endeavor.

c. You stated that low response rates do not necessarily invalidate survey data. Please explain the relationship between response rate and survey validity.

Answer: Nonresponse can affect one's ability to draw correct inferences from survey data in a number of ways. However, if there are no systematic differences in the eating behavior of respondents and nonrespondents to a survey, then less than perfect response rates will not bias the estimation at all. That is to say, there will be no tendency to either overestimate or underestimate the quantities under study due to nonresponse.

It is impossible to ascertain the food intake behavior of USDA survey nonrespondents directly; however, an indirect means is available. USDA studies have found a small, but statistically significant, relationship between a woman's nutritional intakes and her demographic characteristics (age, sex, race, location, income, etc.). Consequently, if the demographic composition of survey respondents is similar to that of the population under study one has a greater confidence in the estimates.

A USDA study completed in 1988 compared the composition of the 1986 CSFII sample with the March 1986 Current Population Survey (CPS), an annual Census Bureau survey. The study indicated reasonable agreement for most demographic variables. Thus, we expect that the CSFII 1986 data adequately represent the dietary intakes of the general population. A preliminary study of NFCS 1987-88 data shows similar results.

In previous surveys, USDA has attached weighting factors based on geographic location and level of urbanization to survey respondents to adjust for nonresponse. USDA plans to adjust 1987-88 NFCS estimates based on a larger number of demographic variables than in the past.

The expected result is even better agreement between the adjusted (weighted) NFCS sample and CPS data.

None of the evidence discussed above guarantees the lack of bias in past or future USDA survey results. Nevertheless, it does provide reasonable assurance that nonresponse bias is not likely to cause strongly misleading results.

Question 16: Who is the nutrition coordinator across all agencies in USDA?

Answer: All nutrition related activities, both research and education, are coordinated by the Human Nutrition Subcommittee of the Secretary of Agriculture's Policy and Coordination Council. The Human Nutrition Subcommittee is chaired by the Assistant Deputy Administrator for Human Nutrition of the Agricultural Research Service and includes representatives from all of the USDA Agencies with responsibility for nutrition related activities, as well as a liaison member from the Department of Health and Human Services. The subcommittee can form standing or ad hoc working groups to deal with specific subjects; the activities of one such group, the Dietary Guidance Working Group (chaired by the Director of the Nutrition Education Ddivision, Human Nutrition Information Service), are described in response to questions 5 and 6.

Question 17: When do you expect the Nationwide Food Consumption Survey data collected in 1988 to be analyzed and published? What contractor was used to prepare and analyze the data and what is the status of the contract? Is the work being completed on time? If not, what are the problems? What procedures were used to select the contractor? What contractor was used to prepare and analyze the 1978 Nationwide Food Consumption Survey data and was the work completed on time?

Answer: The first reports from the 1987-88 NFCS are expected to be out late this year or early next year. However, we have reported preliminary results at several major professional meetings this fall.

National Analysts, (a division of Booz, Allen and Hamilton, Inc.), a private firm in Philadelphia, Pennsylvania, conducted the NFCS 1987-88 under contract with the Human Nutrition Information Service. The work has not been completed on time. Problems include an excessive respondent burden and the use of laptop computers for the collection of the household component. Many of the older, most experienced interviewers dropped out because of difficulty using the computer.

The contractor was selected based on competitive procedures established by the contracting office of USDA's Food and Nutrition Service. Notice of the proposed contract appeared in the Commerce Business Daily and was sent to a list of proposed contractors. A technical evaluation panel was formed to evaluate proposals based on evaluation criteria listed in the request for proposal. Selection of a contractor was made based on both the technical evaluation and the cost of the contract.

National Analysts was the contractor on both the 1985 and the 1986 CSFII; work was completed on time. They were also the contractor on the NFCS 1977-78; work was delayed on that survey. Considering National Analysts excellent performance on the CSFII and their poor performance on the decennial surveys, we suspect that the problem may be the excessive respondent burden in both 1977-78 and 1987-88. The agency will take steps to correct this problem before the next decennial survey.

Question 18: Over the past ten years, numerous advisory groups have urged research be undertaken to improve the accuracy and validity of methods to assess nutritional status. Several USDA Human Nutrition Research Centers have responsibility for nutritional status methods according to their mission statements.

> How do the Human Nutrition Research Centers of the Agriculture Research Service determine which nutritional status methods should be given research priority? How are the methods needs of the USDA Human Nutrition Information Service and the Food and Nutrition Service, the DHHS National Center for Health Statistics, and state governments incorporated into the research agenda of the Agriculture Research Service?

Answer: The development of reliable, efficient and inexpensive methods for determining nutritional status of people and composition of foods is included in the Agricultural Research Service Program plan for priority research attention. The determination of which nutritional status methods are given research priority is based on need and opportunity for success after input from concerned action agencies, scientific advisory bodies, Center Directors, Coordinating Committees, scientists and others. In all cases, the expenditure of funds supporting such research must be approved by the National Program Staff responsible for human nutrition research. When specific research needs are expressed by the Human Nutrition Information Service, Food and Nutrition Service, National Center for Health Statistics or other action agency, these are considered as high priority research needs, and scientists identified by the National Program Staff are assigned to focus on the problem as appropriate.

There are several means for communicating the research needs of various agencies in this area. First, scientist to scientist interaction is common in identifying ways ARS can help meet such needs. Secondly, the USDA Subcommittee for Human Nutrition meets monthly to exchange information. (See question 16.)

The National Program Staff member responsible for human nutrition research in ARS is a member of the Interagency Committee on Nutrition Monitoring and belongs to working groups on Federal-State Relations and Information Dissemination and Exchange. He also is a member of the Interagency Committee on Human Nutrition Research. In addition, special meetings have been convened by ARS with scientists from HNIS, FNS and NCHS to solicit and discuss unmet research needs which could be met by ARS Human Nutrition Research Centers.

Question 19: The August 14, 1989 issue of Food Chemical News reported that, "Cholesterol values in USDA food composition tables need to be reviewed and updated, a study by researchers at USDA's Beltsville Human Nutrition Research Center has indicated."

a. Please provide a copy of the study for the record.

Answer: A copy of the Beltsville study is attached.

b. When will these cholesterol values be revised and published? Will the revised values be used to analyze the 1988 dietary status data?

Answer: We believe the cholesterol values in the USDA food composition tables (Agriculture Handbook No. 8) to be accurate. We have recently reviewed all cholesterol values and will continue to monitor the data closely. The most recent data will be used to analyze the 1988 survey data.

When the Beltsville researchers found lower than expected values for their meal mixtures they assumed that most of the cholesterol values in our food composition tables were determined by the colorimetric method (an older method) which gives consistently higher results than the gas liquid chromatographic method (GLC), a newer method. Most of the data in our tables were derived by the newer procedure.

The ARS researchers found lower than expected analyzed values for cholesterol in meals. We know from previous research that cholesterol values for meals analyzed as a single unit will be lower than when individual items are analyzed separately and the values added together. We believe that providing values for separate foods is appropriate because we cannot analyze the cholesterol content of every conceivable combination of foods.

Question 20: You indicated dietary intake data collected in the Continuing Survey of Food Intakes by Individuals (CSFII) were compared against the Recommended Dietary Allowances (RDA) to determine dietary adequacy.

> A 1986 report of the National Academy of Sciences (funded by USDA) entitled, Nutrient Adequacy indicated the use of a fixed RDA cutoff point to analyze dietary adequacy had no scientific validity and that the results of these types of analyses cannot be meaningfully interpreted. What has USDA done to adopt the recommendations of this report and develop new methods to analyze nutrient adequacy? Will the analyses of the 1988 survey data use the RDA to determine nutrient adequacy? Why?

Answer: The 1986 report entitled Nutrient Adequacy recommended a "probability approach" to the assessment of nutrient adequacy. It is based on the probability that a specific intake is inadequate to meet an individual's requirement. Application of this approach requires information on the distribution curve of requirements as well as information on the distribution of usual intakes of the nutrients. The Subcommittee on Criteria for Dietary Evaluation, which wrote the Nutrient Adequacy report, acknowledged that average requirement estimates, needed to implement the probability approach, are not yet developed. They suggested that development of requirement distributions could be a task for the National Research Council's Committee on Dietary Allowances. USDA agrees with the subcommittee that the National Academy of Sciences should provide the basic information on requirement distributions and has made this known to the Academy, but since such information is currently lacking for most nutrients, the probability approach cannot be adopted at this time.

USDA supports the development of new methods to analyze nutrient adequacy. For example, the Department funded a cooperative agreement with Iowa State University to study methodological factors affecting the measurement of dietary status.

The tenth edition of the RDAs (released in October, 1989) states that the allowances can serve as a guide for interpreting food consumption data. For example, if a population's intake approximates or exceeds the RDA, one could conclude that the probability of deficiency is quite low. Since the Committee on Dietary Allowances has indicated that this is an appropriate application of the RDAs, reports on the 1987-88 NFCS will include tables which express mean nutrient intakes as a percentage of the RDA.

Question 21: When you compare dietary status based on 1978 data with dietary status based on 1988 data, what adjustments are made to account for changes in the nutrient data base which have been made between 1978 and 1988? Are the 1978 data recalculated using the current nutrient value data base?

Answer: The 1978 data will not be recalculated using the current nutrient data base because many changes in the data reflect market conditions not pertaining to 1978—lower fat trim on beef in 1988 for example. Also, improvements in other survey methodologies and procedures have occurred that must be taken into account when comparing data from 1988 with data from 1978. The data base issue will be addressed by making appropriate notations about changes that may have a significant effect on comparisons with 1978 survey results.

Before the 1985 CSFII, we made two major improvements in our nutrient data base that improved our ability to handle data base changes: (1) reorganization and expansion of the food items included on the data base, and (2) implementation of new technology for generating and updating the data base. With these improvements we can more easily determine the effect of nutrient data base changes on survey results and more quickly incorporate new data into the data base. For example, when we received improved data on the cholesterol content of eggs in the Spring of 1989, we were immediately able to determine the impact of this new data on the results of the previous CSFII and to update the data base for use with the current NFCS.

Currently, we are exploring how to account for nutrient data changes in time-trend analyses. Development of procedures for adjusting the nutrient data is also a priority item to be addressed within the next year by the Food Composition Data Working Group of the Interagency Committee on Nutrition Monitoring.

Question 22: The USDA Human Nutrition Information Service was established in 1982.

a. How many administrators has the Agency had since 1982? What has influenced this turnover rate?

b. What effect has the change in Administrators had on nutrition monitoring activities within the Agency?

Answer: The Agency has had five Administrators since its establishment. Two left by promotion to higher office within the Department, one left at the end of the Reagan Administration, and two left to return to their permanent career positions. The primary effect of this turnover has been to give a high degree of responsibility to the permanent career staff to establish priorities and to assure integrity of their programs.

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Problems in Estimating Amounts of Food Cholesterol: Three Methods for Mixed Diets

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Our health conscious society is increasingly dependent on food tables for accurate cholesterol data. However, those data may be less exacting than for most nutrients since methods for determining cholesterol contents of foods have not been standardized. In this study, cholesterol contents of mixed diets have been evaluated as calculated from food tables and as analyzed by two methods, colorimetric and gas–liquid chromatography (GLC), with the goal of identifying discrepancies due to method of analysis. Composites of 60 daily menus from five calorie levels were analyzed, all from controlled diets containing 35% fat calories. Half the composites were from low linoleic acid (low LOA) diets and half were from high linoleic acid diets (high LOA) and contained 10 and 30 g of linoleic acid, respectively. For both diets, cholesterol values analyzed by GLC were about 75% of calculated values but only about 50% of the colorimetric values. Cholesterol values from the colorimetric assay were higher than the total sterol values (cholesterol + plant sterols) from GLC analysis with total sterols representing constant percentages of the colorimetric values. Campesterol and sitosterol content of diets increased as calorie levels increased, but stigmasterol remained constant. Sitosterol was higher in the high LOA diets than in the low LOA diets. It was concluded that the discrepancy between cholesterol values measured by GLC, the presumed method of choice, and cholesterol content of foods calculated from food tables is large and presents a major problem in the accurate assessment of dietary cholesterol.

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INTRODUCTION

A major campaign is underway by health and nutrition scientists to make Americans aware of their cholesterol intakes and their serum cholesterol levels, and the association of these factors with the development of heart disease. However, it is not widely recognized that there is no general agreement among food and nutrition analysts as to how much cholesterol Americans eat. That deficit in our knowledge is brought about by the lack of standardization of methods used to determine cholesterol in food.

Reviews by Sweeney and Weihrauch (1977), Pollak and Kritchevsky (1980), and Vahouny and Kritchevsky (1981) have pointed out the problems associated with methodology used to determine cholesterol in food: that values produced with colorimetric methods are higher than those produced with gas–liquid chromatography (GLC); that method of extraction of lipid from foods causes variations in results; that

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procedures such as thin-layer chromatography and column chromatography used to "clean up" the lipid extracts reduce the amount of cholesterol; and that factors such as levels of fat and fiber also influence final values. Most of the factors listed have been recognized and researched by many (Criner and Feeley, 1972; Feeley *et al.*, 1972; Punwar, 1976; Hubbard *et al.*, 1977; Sheppard *et al.*, 1977; Punwar and Derse, 1978; Kaneda *et al.*, 1980; Adams *et al.*, 1986), although confusion still exists particularly with the classes of fish, seafood and shellfish (Fukui, 1977; Kritchevsky and DeHoff, 1978; Krishnamoorthy *et al.*, 1979; Kovacs *et al.*, 1979; Krzynowek, 1985).

A previous report from this laboratory (Marshall and Judd, 1982) showed that cholesterol content of mixed diets from a controlled feeding study averaged about 20% lower when determined by GLC than when calculated from food tables. The present study, an evaluation of the cholesterol contents of controlled, mixed diets, was conducted to study the reason for the differences. In addition, cholesterol in the self-selected diets of 18 adult men was also evaluated. The composited daily diet samples were extracted and cholesterol and total sterols were analyzed from the same lipid extract by two methods, colorimetric and GLC.

This paper reports the results of analyses of the controlled diets. A manuscript reporting the results of the analyses of the subjects' self-selected diets is in preparation.

MATERIALS AND METHODS

Controlled Diets—Calculation, Preparation, and Collection

As a part of a human diet study conducted by the Lipid Nutrition Laboratory, two controlled diets, each with 35% fat calories, were calculated from an updated USDA food data base (1983) supplemented with information from the food industry and recipes calculated from the data base. The menus were prepared and served in a 7-day menu cycle to adult men in a switchover pattern. One of the diets (low LOA) had 10 g linoleic acid for each of five caloric levels, 2400, 2800, 3200, 3600, and 4000 kcal. The other diet (high LOA) had 30 g linoleic acid per caloric level. Saturated fatty acids varied from 30 to 50 g per menu per day in the two diets. Cholesterol was calculated to be about 500 mg per menu per day for each caloric level. The food contained in 60 daily menus was collected and analyzed. For each calorie level, 3 days of menus, Days 2, 3, and 4, of the 7-day cycle, were collected during the third week of each of the two 6-week periods producing 30 menus each for periods 1 and 2.

As previously stated, cholesterol and other components in the diets were originally calculated using the updated food tables available in 1983 (revised Handbook 8 Sections 1–9). For the present report, the menus were recoded and levels recalculated using the latest food data available (revised Handbook 8 Sections 1 through 16; USDA, 1987) which included updated data from Handbook 456—a part of the Reference Data Base.

In general, the food items such as meats, fruits, vegetables, cereals, breads, desserts, and beverages were from the same sources and were prepared at the same time and allocated across caloric levels. Occasionally, the oils varied to meet the requirements for linoleic acid. Olive oil served as the primary source of oleic acid. Soybean and safflower oil served as the primary sources of linoleic acid along with soft margarines and baked goods. Most of the food items were purchased locally from commercial suppliers or from supermarkets and were prepared in the Human Study Facility on the Beltsville Campus. However, sources of some of the fruits and vegetables varied during the winter months.

For each item on the menu, portions for subjects' consumption and for the preparation of composites were weighed at the same time, to match the subjects' consumption at meal time. Only edible portions were used. The items were boxed and stored frozen after weighing and packaging. Baked products and dairy food items obtained commercially were used as purchased, except when bread was toasted. A sample menu of the diets has been published by Li *et al.* (1988).

Composites were prepared as the items were assembled at each of the three meals and stored immediately at −20°C. Later, the composited meals were partially thawed, homogenized as a total daily (mixed) diet, quick-frozen at −50°C, and freeze-dried at −10°C. Freeze-dried composites were re-ground, and stored frozen at −40°C until analyzed.

Food Analysis

Corrections for residual moisture were made after aliquots of the freeze-dried composites were further dried in an air oven at 100°C for 24 h. Calories were determined in a Parr Bomb adiabatic calorimeter from triplicate aliquots of each menu. In addition, total fat and fatty acids were determined in lipid extracts. Total fat was determined gravimetrically and fatty acids were analyzed by GLC. Only the data for the analyzed cholesterol and other sterols are reported here.

Cholesterol Analysis

Duplicate subsamples, about 10 g per sample, of the freeze-dried composited diets were extracted with chloroform:methanol (2:1, v/v) of highest available purity essentially as described by Folch *et al.* (1957) and modified by Slover *et al.* (1980). In addition, hydroquinone was added as an anti-oxidant before extraction in a 200 ml stainless steel cup connected to a Sorvall Omnimixer.[3] Three extractions were done, each time the mixture was filtered by suction through prewashed Whatman No. 43 filter paper. The filtrate was accumulated in a glass-stoppered graduated cylinder and rinsed with 0.58% NaCl and the phases separated overnight at 4°C. The aqueous layer was removed by suction.

Modified Zak (colorimetric) method. Twenty-five-milliliter aliquots of the chloroform extract were evaporated under N_2, rinsed with absolute ethanol to remove traces of water, and saponified with ethanolic KOH. The tubes were incubated at 80°C in a water bath for 8 min, carefully mixing during the saponification step. The neutral lipids were then extracted three times with hexane of the highest purity. Triplicate aliquots of hexane extracts were evaporated under N_2. To the dry lipid was added glacial acetic acid and the color reagent containing ferric chloride in concentrated sulfuric acid by a modification of the method of Zak (1954). The colorimetric procedure used is referred to as the "Zak" method because of the use of the ferric chloride–glacial acetic acid color reagent in proportions that have frequently been applied to the analysis of both blood and food cholesterol. Other colorimetric procedures have

[3] Mention of a trademark or proprietary product does not constitute a guarantee or warranty of the product by the U.S. Department of Agriculture, and does not imply its approval to the exclusion of other products that may also be suitable.

TABLE I

SELECTED CONTENTS OF THE LOW LINOLEIC ACID DIET (10 g LINOLEIC ACID) AS CALCULATED FROM RECODED MENUS USING 1987 USDA FOOD TABLES

Kcal level:	2400	2800	3200	3600	4000
Energy, kcal	2407 ± 27[a]	2779 ± 31	3201 ± 36	3612 ± 36	4001 ± 39
Protein, g	92.4 ± 1.95	107.0 ± 2.93	116.3 ± 2.76	126.1 ± 4.84	133.1 ± 4.14
Carbohydrate, g	311.5 ± 3.85	360.7 ± 7.12	426.9 ± 6.83	486.4 ± 6.43	547.7 ± 5.41
Fat, g	94.1 ± 1.42	108.3 ± 1.34	123.3 ± 1.84	139.2 ± 1.81	154.5 ± 2.20
Saturated acids, g	41.5 ± 1.08	49.3 ± 0.83	50.0 ± 1.13	49.8 ± 1.17	50.4 ± 1.13
Oleic acid, g	29.1 ± 0.71	34.1 ± 1.15	46.2 ± 1.14	60.2 ± 1.37	72.8 ± 0.96
Linoleic, g	10.5 ± 0.25	10.4 ± 0.17	10.9 ± 0.37	11.5 ± 0.43	11.8 ± 0.64
% kcal					
Protein	15.4 ± 0.27	15.4 ± 0.37	14.5 ± 0.32	14.0 ± 0.47	13.3 ± 0.33
Carbohydrate	51.8 ± 0.36	51.9 ± 0.70	53.3 ± 0.53	53.9 ± 0.54	54.8 ± 0.51
Fat	35.2 ± 0.16	35.1 ± 0.27	34.6 ± 0.22	34.7 ± 0.28	34.7 ± 0.25
Saturated acid	15.5 ± 0.27	15.9 ± 0.17	14.0 ± 0.18	12.4 ± 0.18	11.3 ± 0.17
Oleic acid	10.9 ± 0.25	11.0 ± 0.38	13.0 ± 0.30	15.0 ± 0.37	16.4 ± 0.15
Linoleic acid	3.9 ± 0.09	3.3 ± 0.05	3.1 ± 0.09	2.9 ± 0.10	2.7 ± 0.14

[a] Mean ± SEM; each value represents the average of six menus.

also been used to determine cholesterol in food with varying results (Sweeney and Weihrauch, 1977; Kritchevsky and DeHoff, 1978). The cholesterol standard was purchased from the National Bureau of Standards. The color was read at 560 nm, beginning 30 min after addition of reagent, in a Gilford Model 2400 spectrophotometer.[3] The samples were protected from light during the procedure.

Gas–liquid chromatography. The gas chromatograph was a Hewlett–Packard Model 5840 equipped with a Hewlett–Packard Model 7671A automatic sampler, and a J & W inlet splitter. The column was a crosslinked 5% phenylmethyl silicone, 25 m × 0.20 mm ID fused silica type, with a film thickness of 0.11 μm and operated under conditions previously described by Slover *et al.* (1980). To aliquots of the chloroform extract (20 ml) was added a known weight of cholestanol dissolved in isooctane to serve as the internal standard. After the solvent was removed under N_2, the samples were saponified in ethanolic KOH, and tubes immersed in a water bath at 80°C. Nonsaponifiables were extracted into cyclohexane, and, after evaporation of the solvent, trimethylsilyl ether derivatives were formed. Calibration was with known amounts of cholesterol, campesterol, stigmasterol, and sitosterol. Cholesterol, campesterol, stigmasterol, and sitosterol were quantitated and total sterols calculated as the sum of these individual sterols. More details of the method, including recovery data for cholesterol, will be presented in a separate paper (Thompson and Merola, manuscript in preparation). Very acceptable recovery (96+%) of plant sterol spikes (campesterol, stigmasterol, and sitosterol added in known amounts) has routinely been achieved with this method (Slover *et al.*, 1980).

Statistical Analysis

Data were analyzed statistically by computer by using the General Linear Models programs of the SAS Institute (Cary, NC). Differences among means were evaluated by the Duncan Multiple Range test.

RESULTS AND DISCUSSION

In Tables 1 and 2 are the calculated contents of selected constituents of the two diets after recoding and recalculating them from the 1987 (USDA, 1987) food tables.

TABLE 2

SELECTED CONTENTS OF THE HIGH LINOLEIC ACID DIET (30 g LINOLEIC ACID) AS CALCULATED FROM RECODED MENUS USING 1987 USDA FOOD TABLES

Kcal level:	2400	2800	3200	3600	4000
Energy, kcal	2425 ± 26[a]	2791 ± 30	3201 ± 33	3591 ± 34	3994 ± 36
Protein, g	82.4 ± 2.53	99.1 ± 1.90	112.1 ± 2.52	127.6 ± 1.92	140.9 ± 2.34
Carbohydrate, g	321.9 ± 4.42	367.0 ± 4.59	426.8 ± 5.11	476.3 ± 6.54	532.5 ± 6.48
Fat, g	96.6 ± 1.75	110.3 ± 1.50	124.4 ± 1.73	140.0 ± 1.80	154.9 ± 1.77
Saturated acids, g	27.0 ± 0.52	30.0 ± 0.75	34.4 ± 1.09	41.8 ± 2.30	46.3 ± 1.86
Oleic acid, g	28.8 ± 0.89	37.6 ± 0.97	44.3 ± 1.56	50.7 ± 2.73	59.1 ± 1.54
Linoleic, g	29.3 ± 0.27	29.2 ± 0.62	30.7 ± 0.31	30.6 ± 0.29	31.1 ± 0.51
% kcal					
Protein	13.6 ± 0.30	14.2 ± 0.26	14.0 ± 0.29	14.2 ± 0.26	14.1 ± 0.21
Carbohydrate	53.1 ± 0.83	52.6 ± 0.43	53.3 ± 0.48	53.1 ± 0.52	53.3 ± 0.50
Fat	35.8 ± 0.46	35.6 ± 0.23	35.0 ± 0.20	35.1 ± 0.17	34.9 ± 0.21
Saturated acids	9.9 ± 0.17	9.7 ± 0.18	9.7 ± 0.31	10.5 ± 0.59	10.4 ± 0.40
Oleic acid	10.7 ± 0.29	12.1 ± 0.24	12.4 ± 0.36	12.7 ± 0.62	13.3 ± 0.31
Linoleic Acid	10.9 ± 0.10	9.4 ± 0.26	8.6 ± 0.12	7.7 ± 0.12	7.0 ± 0.12

[a] Mean ± SEM; each value represents the average of six menus.

With few exceptions, the compositions of the diets were like those calculated previously from the 1983 (USDA, 1983) food tables. All of the criteria of the two diets were met as before. Cholesterol, food energy, percentage of fat kilocalorie and gram of linoleic acid remained constant for each caloric level, except for the low LOA diet where the highest caloric levels, 3600 and 4000 kcal, had slightly more linoleic acid than before. (In the present study, no subject consumed the 4000 kcal level more than a few times during each of the 42-day periods).

The possibility that the varying amount of fat resulting from the different calorie levels might cause problems in the colorimetric method was anticipated. Aliquots were diluted to avoid that problem. In the case of the GLC method, aliquot size was set so that fat did not exceed 200 mg, thus keeping all samples well within the range for which the method has been validated.

Table 3 shows the cholesterol content of the diets calculated using the old (1983) and new (1987) tapes of the food tables, and cholesterol analyzed by the modified Zak procedure and by GLC. In addition, the plant sterols in the diets, campesterol, stigmasterol, and sitosterol, the major ones in the American diet, are shown.

Cholesterol analyzed by GLC was about half that analyzed colorimetrically by the Zak method. In all caloric levels of the two diets, total sterols were less than the chemically analyzed cholesterol.

The amount of stigmasterol was constant across caloric levels in both diets while campesterol and sitosterol increased with the increase in calories. The high LOA diet, which contained 30 g linoleic acid per day, had more sitosterol at all caloric levels, except 4000 kcal, than did the low LOA diet which contained 10 g linoleic acid.

In Tables 4 and 5 are the percentages of cholesterol analyzed by the two methods and the plant sterols in relation to each other. The data are presented by period for both diets. In the low LOA diet (Table 4), with few exceptions, percentages were constant if calorie levels were averaged for both periods. These calculations were made with the hope that a correction factor might be applied to values from the food tables.[4] GLC cholesterol values averaged about 75% of the calculated values but only

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[4] Since the preparation of this manuscript, a revised provisional table on cholesterol contents of selected foods shows 20% lower values for eggs (USDA, 1988).

TABLE 3

CHOLESTEROL AND PLANT STEROLS SP AND (mg) IN LOW AND HIGH LINOLEIC ACID DAILY DIETS ANALYZED BY TWO METHODS: ZAK AND GAS CHROMATOGRAPHY (GLC)

Kcal level:	2400	2800	3200	3600	4000
		Low LOA Diet			
Calc. Chol.:					
Old Tables [a]	494 ± 5 [b]	506 ± 8	505 ± 4	508 ± 4	488 ± 11
New Tables [c]	489 ± 6	500 ± 7	500 ± 7	501 ± 6	481 ± 13
Anal. Chol.:					
Zak	607 ± 52	645 ± 17	707 ± 38	758 ± 29	840 ± 29
GLC	372 ± 12	374 ± 11	363 ± 10	368 ± 9	378 ± 20
Anal. Sterols:					
Total	545 ± 8	564 ± 19	579 ± 16	628 ± 26	701 ± 8
Campesterol	31 ± 2	32 ± 2	33 ± 2	38 ± 3	44 ± 2
Stigmasterol	18 ± 0.5	18 ± 1	20 ± 1	21 ± 2	22 ± 2
Sitosterol	124 ± 6	139 ± 9	163 ± 12	200 ± 15	257 ± 17
		High LOA Diet			
Calc. Chol.:					
Old Tables	499 ± 9	509 ± 7	510 ± 6	510 ± 5	528 ± 9
New Tables	495 ± 9	504 ± 7	504 ± 7	503 ± 6	520 ± 8
Anal. Chol.:					
Zak	705 ± 47	737 ± 21	921 ± 30	1050 ± 35	[illegible] ± 87
GLC	367 ± 22	377 ± 12	357 ± 10	389 ± 16	[illegible] ± 8
Anal. Sterols (GLC):					
Total	617 ± 17	691 ± 9	699 ± 20	754 ± 21	807 ± 6
Campesterol	45 ± 2	56 ± 2	62 ± 4	67 ± 3	73 ± 2
Stigmasterol	31 ± 1	38 ± 1	41 ± 1	45 ± 1	49 ± 1
Sitosterol	175 ± 6	220 ± 10	238 ± 11	252 ± 7	277 ± 10

[a] Old Tables. 1983 USDA Food Tables.

[b] Means ± SEM; each value represents the average of six menus.

[c] New Tables. 1987 USDA Food Tables.

about 50% of the Zak values. The GLC values appeared to be the most consistent in relation to the calculated values (GLC chol/Calc), while the Zak values varied more in relation to the GLC values (GLC chol/Zak). The percentages were lower for the high LOA diet, average = 44%, which had more plant sterols than the low LOA diet, average = 52%. Total sterols were a constant percentage of the Zak values, averaging about 83% across diets in the two periods. We did not observed appreciable amounts of other sterols by GLC. Apparently, color producing materials other than plant sterols were present in the diets and accounted for the differences between the total plant sterols analyzed by GLC and the Zak method.

Results of the analysis of variance are shown in Table 6. Those results support the constancy of the GLC cholesterol values and of the total sterols as a percentage of the Zak values with only one exception.

Correlations among analyzed cholesterol values and of plant sterol relationships are shown in Table 7. A number of correlations were strong with probabilities that were, or tended to be, significant even though the number of values correlated was low. Correlations of Zak values with total sterols tended to be stronger for the low LOA diet than the high LOA diet; however, GLC was strongly and significantly associated with total sterols for both diets across most caloric levels.

The results presented here verify the lack of agreement previously found by others of food cholesterol analyzed by chemical and by GLC methods. Colorimetric methods such as the Zak method are expected to yield values higher than GLC. The reaction is dependent on the OH group at the 3 position of ring A. A number of sterols

TABLE 4

PERCENTAGES OF CHOLESTEROL AND STEROLS IN DIETS ANALYZED BY TWO METHODS: LOW LINOLEIC ACID DIET

Kcal level:	2400	2800	3200	3600	4000
			Feeding Period 1		
Phyto./Total[a]	31 ± 2[b]	33 ± 2	36 ± 2	40 ± 2	46 ± 2
GLC Chol./Total[c]	69 ± 2	67 ± 2	64 ± 2	60 ± 2	54 ± 2
Sitos./Total[d]	22 ± 2	24 ± 2	27 ± 2	31 ± 2	36 ± 3
Total/Zak[e]	81 ± 5	83 ± 2	80 ± 8	83 ± 4	85 ± 5
GLC Chol./Zak[f]	56 ± 2	56 ± 2	51 ± 4	50 ± 3	46 ± 2
GLC Chol./Calc.[g]	76 ± 5	75 ± 3	72 ± 3	68 ± 2	80 ± 2
			Feeding Period 2		
Phyto./Total	33 ± 2	34 ± 2	38 ± 3	42 ± 2	47 ± 6
GLC Chol./Total	67 ± 2	66 ± 2	62 ± 3	58 ± 2	53 ± 6
Sitos./Total	23 ± 2	25 ± 2	29 ± 3	33 ± 2	38 ± [illegible]
Total/Zak	108 ± 4	92 ± 0.3	86 ± 11	83 ± 4	83 ± 5
GLC Chol./Zak	70 ± 1	60 ± 2	53 ± 4	48 ± 2	44 ± 8
GLC Chol./Calc.	72 ± 1	78 ± 2	72 ± 1	76 ± 2	79 ± 4

[a] Phyto./Total, %: (phytosterols by GLC)/(total sterols by GLC) × 100; phytosterols: campesterol + stigmasterol + sitosterol; total sterols: phytosterols + cholesterol.

[b] Mean ± SEM; each value represents the average of three menus.

[c] GLC Chol./Total, %: (cholesterol analyzed by GLC)/(total sterols by GLC) × 100.

[d] Sitos./Total, %: (sitosterol b[illegible]/(total sterols by GLC) × 100.

[e] Total/Zak, %: (total sterols by G[illegible])/(cholesterol analyzed by colorimetric method) × 100.

[f] GLC Chol./Zak, %: (cholesterol analyzed by GLC)/(cholesterol analyzed by colorimetric method) × 100.

[g] GLC Chol./Calc., %: (cholesterol analyzed by GLC)/(cholesterol calculated from food tables) × 100.

other than cholesterol possess this functional group and will give a positive reaction. By contrast, compound-specific GLC methods will yield lower values for cholesterol than will colorimetric methods.

The differences between the GLC values and cholesterol content of diets calculated from food tables present a problem that needs to be addressed as soon as possible, in view of the present emphasis on the importance of consumption of dietary cholesterol by the general public. If dietary cholesterol is an important factor in the formation of heart disease, we need more accurate food tables for assessing how much cholesterol we are consuming. If we are consuming only about 75% of the calculated amounts, then these smaller amounts, as determined by GLC, may be of greater significance than considered previously.

It is not possible at present to document the reasons for the differences between GLC cholesterol—the presumed method of choice (Sheppard *et al.*, 1977)—and the food table values.[5] A similar result was previously found (Marshall and Judd, 1982) and that study provided the impetus for this one. Those values averaged differences of 75% across high or low fat diets, regardless of P/S ratio. The values in the food

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[5] Egg cholesterol in the menus in the present study was supplied primarily by the use of egg yolk in small amounts to bring the total calculated cholesterol to 500 mg per caloric level. Recalculation of the egg cholesterol with the revised values resulted in its reduction by 13 to 64 mg. Other sources of dietary cholesterol were meat, poultry, dairy products, and baked goods.

TABLE 5

PERCENTAGES OF CHOLESTEROL AND STEROLS IN DIETS ANALYZED BY TWO METHODS: HIGH LINOLEIC ACID DIET

Kcal level:	2400	2800	3200	3600	4000
			Feeding Period 1		
Phyto./Total[a]	40 ± 3[b]	45 ± 3	49 ± 2	47 ± 2	48 ± 0.9
GLC Chol./Total[c]	60 ± 3	55 ± 3	51 ± 2	53 ± 2	52 ± 0.9
Sitos./Total[d]	28 ± 2	31 ± 3	34 ± 2	33 ± 2	33 ± 1
Total/Zak[e]	89 ± 8	93 ± 6	73 ± 5	69 ± 5	86 ± 8
GLC Chol./Zak[f]	53 ± 2	52 ± 5	37 ± 3	37 ± 4	45 ± 3
GLC Chol./Calc.[g]	79 ± 7	75 ± 2	70 ± 4	76 ± 7	82 ± 1
			Feeding Period 2		
Phyto./Total	42 ± 3	46 ± 1	49 ± 0.7	49 ± 0.7	51 ± 2
GLC Chol./Total	58 ± 3	54 ± 1	51 ± 0.7	51 ± 0.7	49 ± 2
Sitos./Total	29 ± 2	32 ± 2	34 ± 0.8	34 ± 0.9	36 ± 1
Total/Zak	89 ± 2	95 ± 4	80 ± 5	75 ± 4	80 ± 11
GLC Chol./Zak	51 ± 2	51 ± 3	41 ± 2	38 ± 2	39 ± 6
GLC Chol./Calc.	70 ± 3	74 ± 3	74 ± 1	78 ± 2	78 ± 2

[a] See footnotes, Table 4.

[b] Mean ± SEM; each value represents the average of three menus.

tables consist primarily of the data of Feeley *et al.* (1972) and updated data obtained since that time. However, the data of Feeley *et al.* was a compilation of data from both colorimetric and GLC methods with few corrections for cooking, storage, or other variations. LaCroix *et al.* (1973), who provided GLC data for dairy products for the Feeley tables, found that chemical methods produced differences from GLC values by one- to fivefold. The extraction procedures have varied in the AOAC procedures from acid hydrolysis to chloroform–methanol extraction, which gave higher values for cholesterol (Punwar, 1976; Hubbard *et al.*, 1977). Although higher values

TABLE 6

ANALYSIS OF VARIANCE OF CHOLESTEROL AND PLANT STEROLS IN COMPOSITE DIETS: BY FEEDING PERIOD

	Period 1			Period 2		
Classes	Kcal Level	Diet	Kcal* Diet	Kcal Level	Diet	Kcal* Diet
Zak Chol.	0.0027[a]	0.0001	NS	0.0004	0.0007	NS
GLC Chol.	NS	NS	NS	NS	NS	NS
Campesterol	0.0003	0.0001	NS	0.0001	0.0001	NS
Stigmasterol	0.0002	0.0001	NS	0.0001	0.0001	0.0066
Sitosterol	0.0001	0.0001	NS	0.0001	0.0001	NS
Total Sterols	0.0001	0.0001	NS	0.0001	0.0001	NS
%						
Phyto./Total	0.0009	0.0001	NS	0.0009	0.0001	NS
GLC Chol./Total	0.0009	0.0001	NS	0.0009	0.0001	NS
Sitos./Total	0.0031	0.0119	NS	0.0011	0.0153	NS
Total/Zak	NS	NS	NS	0.0361	NS	NS
GLC/Zak	0.0029	0.0026	NS	0.0001	0.0001	NS
GLC/Calc.	NS	NS	NS	0.0401	NS	NS

[a] Probability computed by least squares analysis of variance.

TABLE 7

CORRELATIONS AMONG VALUES FOR ANALYZED CHOLESTEROL AND PLANT STEROLS IN CONTROLLED DIETS

	GLC vs Zak	Zak vs Sitosterol	Zak vs Total Sterols	GLC vs Total Sterols
Low Linoleic Acid Diet				
kcal level:				
2400	0.820[a] (0.089)[b]	-0.966 (0.007)	0.537 (0.351)	0.904 (0.035)
2800	0.503 (0.309)	0.697 (0.124)	0.727 (0.102)	0.824 (0.044)
3200	0.183 (0.729)	-0.834 (0.039)	-0.650 (0.162)	0.424 (0.402)
3600	0.659 (0.155)	0.620 (0.189)	0.704 (0.118)	0.849 (0.033)
4000	-0.002 (0.997)	0.049 (0.937)	-0.044 (0.943)	0.791 (0.112)
High Linoleic Acid Diet				
kcal level:				
2400	0.929 (0.007)	-0.740 (0.093)	0.845 (0.034)	0.926 (0.008)
2800	-0.362 (0.481)	0.320 (0.537)	-0.361 (0.482)	0.538 (0.250)
3200	-0.012 (0.982)	-0.038 (0.943)	-0.104 (0.844)	0.816 (0.048)
3600	-0.203 (0.699)	0.160 (0.761)	-0.093 (0.860)	0.882 (0.020)
4000	-0.135 (0.798)	0.441 (0.381)	0.495 (0.318)	-0.046 (0.872)

[a] Correlation coefficient (r); each value represents the average of five or six values.

[b] Probability.

are now accepted as a consequence of use of the Zak or similar colorimetric or chemical procedures, they are still being published and used (Rhee *et al.*, 1982; Jones, 1986; Mustafa, 1988). One problem appears to be in the assumption that methods used for determining blood cholesterol are suitable for determining cholesterol contents of food.

If individual foods or groups of foods are responsible for the divergence of the values, then they must be found, analyzed, and identified so that the food tables can be corrected. If the method of choice in the analysis of food cholesterol is the GLC method, then extraction and saponification procedures must be standardized and their use encouraged.

It is tempting to speculate that the levels of sitosterol combined with other plant sterols may be of greater consequence than cholesterol in their effect on blood cholesterol levels. A hypocholesterolemic effect was found to accompany an increase in dietary sitosterol when plant sterols were substituted for animal fat in the diet. About three decades ago, Beveridge *et al.* (1957) found a decrease in the absorption of cholesterol when dietary sitosterol was increased. This issue has been addressed by others (Subbiah, 1973; Börgstrom, 1975; Vahouny and Kritchevsky, 1981; Mattson *et al.*, 1982; Ikeda and Sugano, 1983). We plan to address that issue in a subsequent paper.

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Statement by

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I am Audrey Cross, former special assistant to the Secretary of Agriculture during the Carter Administration, and currently professor of nutrition at Columbia University School of Public Health and a nutrition news correspondent at CNBC television. I will address the committee today from each of those perspectives.

In August of 1978 I assumed the title of coordinator of human nutrition policy at USDA, reporting directly to Secretary Bob Bergland. Among first assignments was to coordinate joint USDA-DHEW response to Congressional queries about the multiple data collection systems which each gather information on the diet and nutrition of Americans. I shared the view of Congressmen making the inquiry that integration of federal surveys was both feasible and desirable. And that improved data analysis and speed of release could be achieved.

As we sit together here today, I do not need to tell you how many times your efforts to cajole or coerce coordination have failed. You are more than aware of the snail like pace at which bureaucracy moves and the many jurisdictional roadblocks that impede progress toward a single monitoring and surveillance system. And you are more than aware of how your own needs for information for policy, program and budget purposes has gone wanting.

What I would like to share with you is the growing and urgent need for information and the impact which failure to meet those needs has. I have four specific examples. First from the State of California and the City of New York with whom I have consulted on public health nutrition issues. Then from my perspective as a nutrition communicator and educator with a national television network. Finally, as a lawyer, concerned with food regulatory issues.

State Needs:

During the past decade, state and local governments have increasingly shouldered the responsibility for planning programs and services to meet health needs within their borders. Limits in state and federal resources and demands for accountability in government have heightened the need for reliable and timely data. All too frequently that data is nonexistent.

Desperate for such data, California in 1986 became the first state to pass legislation authorizing a study of the feasibility of implementing a statewide nutrition monitoring system. (Nutrition Monitoring Development Act of 1986) As consultant to the study, we found conditions that typify the other 49 states. Twenty state and federal programs were identified, serving 6.2 million Californians at an annual budget of $1.7 billion.
While all programs collected some nutrition information, little standardization existed and not all programs aggregated nor reported the information which they did collect. Thus comparisons between programs was impossible. Many times, program mandated data was little more than head counts or other indicators of services.

Like other states, California has no ongoing program to track trends in dietary intake or nutrition status of its more than 23 million general population, nor even of its special groups such as pregnant women, school aged children or the elderly.

Local Needs:

Similar problems exist in the nation's second most populous state, and its most densely populated city, New York. In a collaborative effort with the New York State Health Department, Columbia University Division of Maternal and Child Health is attempting to identify school based information which could monitor trends in child nutrition status.

We have encountered a number of difficulties. First, schools collect little data which has relevance to child nutrition status. The state health department does have some monitoring activities, but these do not segregate data on school aged children and often under samples the City of New York.

Federal data sources are also of little help. Current sampling methods under represent this age group. For example, the last USDA survey included only 485 children. Even were children adequately included, the relevance to New York City would be questionable. Ethnic mix, social and economic conditions can change drastically within one school year in the City. Thus national and even regional averages may provide local policymakers little information which is relevant, sufficient or timely.

This is not to say that either of our two major surveys - NHANES and NFCS - are worthless. On the contrary. They are invaluable. States cannot solve diet and health related problems alone. Just as they cannot solve smoking, drinking, air or water pollution or solid waste problems alone.

Federal coordination is needed to standardize methods for data collection in surveys as well as in government funded nutrition programs. This would allow comparison between programs and surveys, and comparisons between states and between a state and federal norms or results.

States need technical assistance. Few states can afford to either research and refine data collection methods or equipment. Nor can they afford statisticians and epidemiologists who are specifically trained in nutrition. Even if they could afford them in New York, very few of such personnel have been trained at Columbia and Cornell and they have taken federal employment!

Unless and until there is a uniform federal system mandated by law to provide a foundation and infrastructure we will continue with a Tower of Babel condition. The quantity, quality and speed with which the states receive information, will, as it has in the past, continue to be at the whim of changes in administration, precarious OMB oversight, unstable budgetary conditions and jurisdictional disputes.

From the stance of state and local government needs, the importance of a coordinated national nutrition monitoring and surveillance system is obvious. But what of general public information needs?

Public Needs:

On February 27 of this year, the Natural Resources Defense Council (NRDC) issued a report, "Intolerable Risk: Pesticides in our Children's Food." The report estimated that between 5,500 and 6,200 of the current population of preschoolers may eventually get cancer solely as a result of exposure to certain pesticides in their diet before age 6. They specifically named Alar on apples as contributing 90% of that risk.

As the nutrition news correspondent for a national consumer and business news network, CNBC, I covered the story. As an ex-government employee, I hoped NRDC had miscalculated. The Environmental Protection Agency claimed they had. EPA officials criticized the NRDC report for relying on 1985 food consumption survey data from USDA's Continuing Survey of Food Intakes of Individuals. EPA said that while the 1985 data was certainly more current than 1977 NFCS statistics, it was less reliable because the sample size was about ten times smaller than the 1977 study.

The difference of opinion as to which data base to use made a 100 fold difference in the estimate of risk of exposure for preschoolers which EPA and NRDC each claimed. This 100 fold difference made a $100 million difference to the nation's apple growers. By May United Fresh Fruit and Vegetable Association was reporting a loss well above that amount in raw apples sales alone -not including decreased sales of processed apple juice and apple sauce. The State of Washington along with New York suffered major agricultural losses.

Did NRDC use the wrong data base? In their sincere attempt to inform the public, they chose the most recent, the most up-to-date statistics which government had to offer. If they erred, their error serves only to dramatize the need for an on-going national surveillance system.

Regulatory Needs:

Finally, the need for a national nutrition monitoring and surveillance system is emphasized by regulatory issues regarding proposals for approval of substances to be substituted for dietary fats.

The Food and Drug Administration depends heavily upon NNMS data to evaluate the potential exposure rates and risks of substances proposed for use in foods. Recent proposals to introduce a substitute for dietary fats pose issues not confronted by the agency in its prior regulatory functions.

Dietary fat is a macronutrient consumed in large quantities - at least one third of our per capita caloric intake. FDA has previously dealt primarily with items to be used in micro quantities such as color, flavor and texture agents. Risk assessment dealt with minimum exposure to microgram amounts. Fat substitutes are more likely to be consumed in grams or ounces - a quantum difference in amount.

In using NFCS and NHANES data, FDA confronts several limitations in evaluating these proposals. Proctor and Gamble, manufacturer of Olestra, argues that intakes of dietary fat substitutes will reach only 5-9 grams per day for the average person. Their estimates are based on current dietary pattern data from NFCS and MRCA (Market Research Corporation of America).

Their estimates are based on several assumptions. First, that consumption patterns will not change in response to the introduction of fat substitutes. You know as well as I do that those who have been waiting to have-their-cake-and-eat-it-too, will be first in line at the grocer to purchase new lowered calorie products made with fat substitutes.

The estimates also assume that use will be limited to those items for which initial approval is requested. Intake of artificial fats could easily double as additional types are approved for use and as the range of food products in which they are used is extended.

Neither are the estimates age-group specific but are rather based on a composite person. Arguably, certain groups, such as teenagers who may consume more snack foods than do other age groups, may be exposed to even larger quantities of artificial fats.

In addition to these difficulties in predicting risk, FDA faces potential problems in monitoring fat substitutes once they are approved for use. New and novel foods are not classified separately in FDA survey systems. Thus potato chips, whether made with vegetable oil or Olestra, would be categorized together.

FDA is not responsible for the health of the agriculture sector. Yet their decision in this matter will broadly effect safflower, soybean, cottonseed and corn growers and dairy farmers. USDA will rely upon FDA estimates of use of artificial fats when forecasting that impact. And FDA will in turn rely upon nutrition status monitoring and surveillance data provided by our major federal survey programs.

Conclusion:

In conclusion, current monitoring and surveillance systems offer an invaluable resource of information for local, state and federal policymakers. Yet the very separate nature of these systems leads to gaps in information, delays in data aggregation, analysis and release, which narrow its utility.

It has been ten years since I spoke with Congress about these issues. You are to be commended. You have been persistent in your efforts to weld a workable relationship between the major federal surveys in order to meet the needs of your constituents.

And progress has been made, as witnesses from the two departments have noted. But that progress has been and will continue to be piecemeal and prolonged until you mandate otherwise. I urge you to send that charge from the Congress.

Statement

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Joint Hearing on National Nutrition Monitoring Legislation

Committee on Science, Space, and Technology
Subcommittee on Science, Research, and Technology

Committee on Agriculture
Subcommittee on Department Operations,
Research, and Foreign Agriculture
Subcommittee on Domestic Marketing, Consumer Relations,
and Nutrition

U.S. House of Representatives
September 21, 1989

I am Marion Nestle, Professor and Chair of the Department of Home Economics and Nutrition at New York University. From October 1986 through September 1988, I was Staff Director for Nutrition Policy in the Office of Disease Prevention and Health Promotion, Public Health Service, Department of Health and Human Services. In that position, I was Managing Editor of the 1988 Surgeon General's Report on Nutrition and Health and Staff to the Department's Nutrition Policy Board.

I appreciate this opportunity to testify in favor of national nutrition monitoring legislation. My experiences in the Department and in my present position provide compelling evidence for the need for such legislation and, indeed, support the conclusion that an effective system of nutrition monitoring is unlikely to exist without it.

In this testimony, I will describe four areas in which my work in nutrition policy has required basic information about dietary intake that is unavailable under the national nutrition monitoring system as presently constituted. These are: (1) trends in U.S. dietary intake patterns, (2) evaluation of the 1990 national nutrition objectives, (3) prevalence of hunger and food insecurity in the U.S., and (4) dietary practices of population sub-groups at high risk of diet-related chronic disease.

Trends in Dietary Intake

In July 1988, the Surgeon General's Report on Nutrition and Health identified overconsumption of fat as a national priority for dietary intervention.[1] The report, however, provided no information on trends in fat intake by the population that could be used to confirm the need for dietary change or as a basis for evaluation of intervention strategies. This omission was no mere oversight. During the four years of preparation of the report, at least seven Ph.D.-level nutrition professionals wrote lengthy drafts of an intended chapter on Dietary Patterns and Practices. Each of these individuals reviewed data on food availability and dietary intake data from the Department of Agriculture (USDA) and Department of Health and Human Services (DHHS). In reviewing the successive drafts, Nutrition Policy Board staff were unable to reach consensus on the significance of available data and concluded that current survey methods do not provide enough information about changes in dietary intake patterns to draw scientifically sound conclusions about trends over time.

As published, the Surgeon General's Report describes the major surveys and the kinds of information they provide, but draws no inferences for either long- or short-term dietary trends. This conspicuous gap is addressed by the report's recommendation to establish "...a nutrition surveillance system that will enhance the monitoring of population-specific and State-specific trends in the occurrence of nutrition-related risk factors and conditions."

How is it possible that the major national nutrition monitoring surveys fail to provide information on which to base development of policies and programs? We infer dietary patterns from two principal sources of information: food availability data from the USDA, and dietary intake data from both USDA and DHHS. Each of these surveys uses different methods to collect different kinds of information from different groups of people.[2] Like apples and oranges, the data are not comparable.

The USDA compiles information on food availability from annual estimates of the quantities of food commodities produced and marketed in the U.S. The agency has been collecting this information since 1909 and has published food availability data as an historical series to the mid-1960s.[3] Since then, USDA regularly publishes data for the most recent 20 years.[4] Food availability reflects the amounts of food available at the wholesale and retail level and is not corrected for waste, losses, inedible components, or amounts fed to pets. It also is not corrected for variations in use by population sub-groups. Thus, it is only an indirect indicator of dietary intake and is limited in usefulness.

Dietary intake is assessed by USDA through its Nationwide Food Consumption Survey (NFCS) and Continuing Survey of Food Intakes by Individuals (CSFII). Data from the NFCS, which collects information from households, were last published for 1977-78; data from 1987-88 are not yet available.[5] The CSFII was initiated in 1985 and repeated in 1986 but its data have been limited to three sub-groups: children 1 through 5 years and adult men and women 19 through 50 years of age.[6],[7] Because of differences between the NFCS and CSFII sample populations, food composition data bases, and methods of data collection, it is difficult to draw sound conclusions from these surveys about the ways diets might--or might not--have changed between 1977 and 1986. Subsequent data collections are designed to correct these methodologic problems but will not yield information on time trends for several more years.

Dietary intake data are also collected by the Centers for Disease Control/National Center for Health Statistics as part of the National Health and Nutrition Examination Survey (NHANES).[8] NHANES I was conducted in 1971-74, NHANES II in 1976-80, and Hispanic HANES in 1982-84. Because NHANES III has only just begun collecting current information, it also will not be possible to identify time trends from these data in the immediate future.

Efforts to resolve methodologic differences between the various USDA and DHHS surveys have preoccupied Congress since the mid-1970s[9] and representatives of the sponsoring agencies throughout the last decade.[10] Progress has occurred, but reluctantly. The pressing need for reliable information on trends in dietary intake--and the agencies' present inability to produce it--demand significant changes in the present system.

1990 Nutrition Objectives

Since the late 1970s, the Department of Health and Human Services has been engaged in a major campaign to establish a national public health agenda.[11] This campaign is implemented through development of specific, measurable objectives for improvements in key areas of health behavior. The first set of 226 objectives was developed in 1980 and targeted for achievement by 1990.[12] Among these objectives, the 17 devoted to nutrition were designed to improve maternal and child health, to reduce dietary risk factors for chronic disease, to promote the education of consumers, foodservice personnel, school children, health professionals and their patients, and--last but not least--to create a national system to monitor these and other indicators of nutritional status in the population.[13]

In 1985, mid-way through the decade, the Public Health Service reviewed progress toward achievement and concluded that only six of the nutrition objectives (35 percent) could be expected to be accomplished by 1990.[14] This conclusion, however, did not necessarily mean that the country was failing to meet 65 percent of its nutrition priorities. Because tracking data were either inappropriate or unavailable, progress toward attainment of six of the objectives could not be measured. As a result, it will not be possible to measure the overall progress of the nutrition component of the Public Health Service's decade-long health promotion initiative. For the nutrition community, the principal benefit of this exercise has been to provide useful experience on which to base development of objectives for the year 2000.

Hunger Prevalence

Increasing demands for emergency food assistance coupled with the realization that the new poor include families, women, children, and recently employed adults have stimulated efforts to define the extent of hunger[15] or of deficiencies in what is referred to as food security[16] in the U.S. Within the past ten years, more than 100 different church, community, advocacy, and governmental groups have administered hunger surveys to selected target populations.[17] Despite the efforts of these groups, the national prevalence of food insufficiency remains undefined. As a result, the extent of need for intervention is uncertain and demands for large-scale Federal programs to improve food security are controversial.[18]

Most local hunger surveys were designed to document the need for increased resources or to focus attention on the food needs of poverty groups; few of them have included the systematic documentation, precise definitions, consistent study methods, and appropriate sampling techniques that would permit application of their results to larger populations.[19] The DHHS and USDA national surveys have not adequately sampled homeless people, migrant families, and other groups that might be expected to have limited access to food.[8]

The need for development of standards and means of measurement that more accurately portray hunger and poverty was one of four principal recommendations of the 1984 President's Task Force on Food Assistance. The Task Force "...was consistently troubled by the lack of appropriate information on the extent of hunger and poverty in the U.S." and it enphasized that "the absence of reliable data makes the evaluation of and solution to such problems considerably more difficult."[15] Yet the addition of food sufficiency questions to NHANES III was permitted only after prolonged discussions between USDA and DHHS. Reportedly, these agencies were only able to reach agreement on the use of these questions when compelled to do so by the Office of Management and Budget.[20] Mediation by an outside agency was necessary in this case and is likely to be necessary in others.

Dietary Practices Among High-Risk Sub-Groups

A disproportionate burden of diet-related chronic disease is borne by minority sub-groups in the population.[21] Black Americans, for example, display higher rates of blood pressure, stroke, diabetes, and other diseases associated with obesity than the general public[22] and diet-related chronic diseases are the major causes of death among American Indians and Alaska Natives.[23] Although these observations suggest an immediate need for dietary intervention, too little is known about dietary intake patterns in these populations to design appropriate strategies. Both USDA and DHHS have addressed the need to obtain dietary data from high-risk groups, but their large surveys continue to collect information on too few minority individuals to distinguish results by sex, age, socioeconomic status, location, and broader categories of racial and ethnic variation.[24]

The CSFII reports results in just three race categories--black, white, and other.[6,7,25] Eventually, Hispanic HANES will yield information on Mexican-, Cuban-, and Puerto Rican-Americans and NHANES III will oversample Mexican-Americans and Blacks.[8] Better coordination of these surveys might provide population samples large enough to provide more useful information about these groups.

Conclusions

From these examples, we must conclude that the present national nutrition monitoring system is unable to provide adequate information for development of rational policies and programs and appropriate allocation of resources and that this situation is unlikely to improve significantly in the near future without legislated outside intervention. Such intervention has proved useful in making the system more responsive to the needs of policymakers. An independent examination of its goals, objectives, and methods could greatly improve the national nutrition monitoring system. Calls for a coordinated, comprehensive surveillance system have been made repeatedly since the 1969 White House Conference on Food, Nutrition, and Health.[10,26] It is time to insist that the system deliver on its promises and to establish a new era of cooperation in monitoring the nutritional health of Americans.

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NUTRITION MONITORING HEARING

September 21, 1989

FOLLOW-UP QUESTIONS:

Dr. Nestle

1. *As a former nutrition coordinator of a Federal agency involved in nutrition monitoring activities:*

   a. *Where do you believe improvements can be made by the Federal government in nutrition monitoring? Please describe, based on your experience, how coordination between USDA and DHHS was handled and how it should be handled.*

   During my tenure as Senior Nutrition Policy Advisor in the Office of Disease Prevention and Health Promotion, I observed and participated in numerous efforts to improve coordination of nutrition monitoring activities between USDA and DHHS. These efforts included informal/ad hoc meetings between agency staff members, more formal meetings of senior level staff, and memoranda written by these individuals. These efforts led to improved communication between the agencies but they did not -- and could not -- address fundamental issues of coordination; true coordination of survey design and methods must necessarily be implemented by individuals thoroughly familiar with the issues. An external advisory committee with no vested interest in maintaining current surveys the way they are, would be useful for setting policies that could then be carried out by staff experts.

   b. *How would you rate the effectiveness of interagency committees to enhance nutrition monitoring activities and the degree to which recommendations of advisory groups, such as the National Academy of Sciences, have been incorporated in plans, surveys, and the infrastructure necessary to enhance the nutrition monitoring system?*

   The interagency Committee on Nutrition Monitoring is a useful forum for information sharing but its members -- who may be short-term political appointees -- do not necessarily have the expertise to establish monitoring policies and procedures. The existing lack of genuine coordination is reflected in the current inability of the system to yield data on trends in intake of dietary fat over time.

2. Over the past several years many witnesses have testified about the need for more efficient methods of collecting data and better standards for comparing data. Do you agree? If so, what should be done to accomplish this?

   I view the development of more efficient and comprehensive data collection methods as a two-stage process. The first is policy-setting. An independent panel of experts should evaluate current methods and make recommendations for improvements. In the second stage, these recommendations would be implemented by staff experts in the agencies. These staff would meet regularly to share information and plans.

3. Are the nutritional status data collected by the Federal government acceptable or useful to State and local health departments? Are there real differences between States in terms of nutritional status?

   States and local communities differ in rates of employment, poverty, immigration, and other factors that greatly influence nutritional status. Federal data are extremely useful in establishing a national base for comparison. Some surveys (e.g. Hispanic HANES) have oversampled groups in certain areas and are able to produce data on population groups in specific locales but such specific data are not generally available. Such data are required for development of programs targeted to specific population groups.

4. Do you make specific use of the data collected by the Federal agencies in your current position and how helpful are these data?

   I make frequent of use of USDA food availability data and, to a lesser extent, dietary intake data; I also refer to published analyses of NHANES data. The USDA dietary intake data would be more useful if the agency provided more detailed information on the methods used to collect it. The NHANES data would be more useful if analyses were published more quickly. Both would be more useful if they employed the same definitions and used comparable methods.

5. Nutrition monitoring brings together complicated multi-variable nutrition requirements and interpretation of research data with complex statistical techniques. Given the complex nature of nutrition monitoring do you feel:

   a. A long-standing advisory committee with rotating membership would be more effective than an ad hoc advisory group or expert panel? Why?

      The complexities of nutrition status monitoring demand a highly sophisticated level of expertise. Because such expertise comes with experience and time, development of a long-standing expert advisory committee makes more scientific sense.

b. *Is legislation suggesting specific components of a national nutrition monitoring system (such as nutritional status methods research, assistance to state and local governments, a detailed plan identifying resources needed to implement the plan) preferred to a general mandate to carry-out an effective and comprehensive nutrition monitoring system? Why?*

The key provision of current nutrition monitoring legislation is the independent advisory council. The agencies have had a general mandate to coordinate their monitoring activities since 1977. Progress has been painfully slow. It could be hastened by an independent advisory group free of vested interests.

6. *Have you used nutritional status data in teaching nutrition majors and medical students? Is the information as currently disseminated adequate and useful for teaching and/or research purposes?*

In the classroom, I use dietary intake and nutritional status data in two ways: to illustrate the difficulties involved in determining the dietary intake or nutritional status of the population, and as a case study for developing skills in critical evaluation of current methods. In this sense, these data are quite useful for teaching purposes. They are too imprecise to be taken literally for research purposes and can only be considered as estimates.

7. *You mentioned USDA and DHHS have addressed the need to obtain dietary data from high-risk groups, but large surveys continue to collect information on too few minority individuals to be meaningful. How could this problem be solved and why have the agencies not been successful in designing surveys to obtain adequate data on high-risk groups?*

Until recently, the agencies could not produce meaningful data on high-risk groups because they made no special effort to do so and the large, national surveys do not collect information on large enough numbers of minority individuals to make inferences. Hispanic HANES was designed to determine the nutritional status of this population; other groups would also be best reached by targeted surveys.

TESTIMONY OF
SUZANNE S. HARRIS
FORMER DEPUTY ASSISTANT SECRETARY OF AGRICULTURE
FOR FOOD AND CONSUMER SERVICES

Mr. Chairman and members of the Subcommittees, I am Suzanne S. Harris, and I had the honor and privilege of serving as the Deputy Assistant Secretary of Agriculture for Food and Consumer Services from October, 1985 to January, 1989. I would like to thank you for the opportunity to discuss my perspective on the nutrition monitoring system based on my experience as a policy official with the U.S. Department of Agriculture (USDA). At the outset I want you to know that the views I am expressing today are my own and do not reflect those of my current employer or necessarily those of the Department of Agriculture.

Much of my time while at USDA was devoted to understanding the issues surrounding nutrition monitoring legislation and finding ways to improve the Federal system for nutrition monitoring - with special attention to the USDA component of the system. I am proud of what all of us working together have been able to achieve. But I realize not everyone is convinced of USDA intentions. In fact a few members of Congress and others who are strong supporters of nutrition monitoring legislation have charged that we were resisting efforts to improve the system.

Obviously, I do not agree with that assessment, but I think it is an appropriate starting point for my comments today.

Some say that the real problem is an aging turf battle between two bureaucracies and that strong prescriptive legislation is what is needed. There are turf battles going on - several of them - within departments, between departments and even between branches of our government. They are certainly not restricted to nutrition monitoring.

USDA was a strong supporter of nutrition monitoring throughout my tenure and I believe it remains so today. The monitoring legislation sponsors have stated the need for legislation as a way of making the Federal agencies take responsibility for nutrition monitoring. USDA and the Department of Health and Human Services (DHHS) have taken responsibility for the nutrition monitoring system and they are committed to its improvement. Both are justifiably proud of their contributions to the system and are working diligently to improve the system. Furthermore, the departments are committed to coordinating the monitoring activities through shared responsibility rather than one or the other being designated as the lead agency. Each has its own needs for nutrition monitoring data and each provides unique expertise. These facts make shared responsibility appropriate and essential. So turf is not the reason for resistance to the legislation.

Many of the concerns raised by supporters of nutrition monitoring legislation were legitimate in the early 1980's. Voicing these concerns, i.e. lack of timeliness of information, lack of coordination, lack of comparability, and limited outside input, has motivated change in the system. These changes have been enumerated by the departmental witnesses so I will not repeat them here. During my tenure at USDA I was frustrated by the unwillingness of monitoring bill supporters to acknowledge these improvements. Slowly, acknowledgment is being voiced. But it is often followed by the charge that these improvements are not enough. I agree and so do the members of the Interagency Committee on Nutrition Monitoring. That is why they are continuing to work toward the goal of a more highly integrated and responsive nutrition monitoring system.

We are all looking at the same information, but some of us see a glass half empty, and a few see a glass half full. I am in the latter category and I urge you to consider how you are viewing the system before you pass any legislation. Legislative overkill as a result of a pessimistic viewpoint may create more problems than it solves.

What are the components of an ideal national nutrition monitoring system? From reading and rereading the testimony of the witnesses at the many hearings over the past years, I offer the following components as essential for a truly national nutrition monitoring system: strong coordination between components to achieve complementarity and adequate coverage; evaluation and interpretation of results for policy makers; exchange of information between users to address needs and provide expertise; and research to improve data collection, analysis, and dissemination. As Congressman Brown so succinctly states it - infrastructure and science base.

Then why hasn't USDA jumped up and down for the passage of monitoring legislation? Because these bills have gone beyond the essential components to prescribe a complicated and cumbersome set of requirements. These unnecessary requirements will divert scarce resources - dollars and staff time - away from actual monitoring activities. In past testimony the progress touted by the departments was described by bill sponsors as just meetings, reports, and revised plans. In truth, what more is H.R. 677? Without substantial additional funding the result of H.R. 677 will be meetings of the Board, and the Advisory Council, reports from the Advisory Council, the Board, and an outside scientific panel, and a revised plan. The ongoing departmental reviews of dietary guidance materials and sessions for updating of the Dietary Guidelines based on the Dietary Guidelines Advisory Committee recommendations will receive greater scrutiny - more meetings and reports.

How then is H.R. 677 an improvement over the current system, which some disparage? Will legislation make the departments all work together happily? The simple and direct answer is no. There will continue to be legitimate issues for debate. And there is always the potential for personality conflicts. Your bill will not change either. It is up to the policy leaders in the affected departments to make coordination a continually improving reality with or without legislation.

The question of wasteful duplication of data collection is often cited as evidence that the watchful eye of an advisory committee and better coordination are needed. Supposedly these wasted funds could be rescued and made available for expanded data collection and the two grants programs. I am sure there is some inefficiency in the system, as with any other large diverse system. But looking at the broad array of activities that make up the monitoring system, I do not know of any duplication of the magnitude being alluded to by the advocates of H.R. 677.

My mental picture of the monitoring system is a mosaic - many pieces fitted together with some overlap to permit linkage. As defined in the 1987 Operational Plan, it is "a complex assortment of interconnected activities which provide regular information about the contribution that diet and nutritional status make to the health of the American people and about the factors affecting diet and nutritional status." Some of the activities are conducted primarily for the nutrition monitoring system and others contain only a small component that is used by the system. Some activities require face-to-face contact with individuals to obtain a variety of information and others rely on state and local record keeping. Some deal with food at the retail level and others with agricultural production at the wholesale level. In short the components are diverse and it is this diversity that is essential to the success of the system.

Since no one survey can provide all of the information that is necessary, linkage between these diverse components is critical. For example, the two major survey systems - DHHS's National Health and Nutrition Examination Survey (NHANES) and the USDA's Nationwide Food Consumption Surveys (NFCS) - overlap in the collection of some data on dietary intake and sociodemographic characteristics. These are the linkages that allow comparison between the two different samples.

Much time and effort went into comparing the variables used in these two surveys before the beginning of the most recent data collection. Many constructive changes were made in both surveys, a triumph as I saw it from the trenches. But those on the outside, said no - not enough, the sampling frames are not identical. That is right. They are not and for good reason - these surveys are designed for different purposes. For example, the NHANES is interested in collecting data from individuals while the NFCS is interested in collecting data on food usage by family units as well as by individuals. These are fundamental and valid differences. If the difference is removed there will be a loss of valuable information. I assume this is why the bill sponsors require the retention of both surveys.

In the system I picture, each member agency would do what they do best and would coordinate that function with those of the other members of the system. This is the goal of the ICNM as I see it. Achieving the goal takes time. Neither H.R. 677 nor H.R. 1608 will speed up the accomplishment of the goal. These surveys, particularly the larger ones, require a long lead time and for some, like NHANES, once begun there is a fairly long time to completion. Both USDA and DHHS are committed to major survey activity already underway through at least 1994. The Department of Commerce activities are also on going.

If addressing the 14 specific points in the revised plan required by H.R. 677 or to a lesser extent the 16 points of H.R. 1608 is to be more than a paper exercise, major revisions in the current plan will be required. Such revisions would also bring the ongoing data collection to a halt just as we are about to reach an important goal. Though 1990 is still a few months away, continuous data collection using a moving average approach is in place through the USDA's Continuing Survey of Food Intake by Individuals and the DHHS' NHANES. These data will be available for use in the next few years. The result of the enactment of these bills will be that overworked staffs will be shifted from working on the timely release of the very data you are asking for, to writing another plan.

The issue of money has been part of the debate on monitoring legislation. The current proposal contains no authorization of funds. Yet to expand data collection to cover the high-risk groups listed in the legislation will require more money. In my opinion for small, high-risk groups such as pregnant women and Native Americans, it is more cost effective and scientifically appropriate to conduct special surveys rather than to increase the sample size of the large surveys to include these population subgroups in statistically representative numbers. Such special surveys can be done within the context of the current system.

In fact while I was at USDA I continually asked for more money to do such special surveys. I was not always successful. But before you jump on the Reagan administration for not being serious about nutrition monitoring, lets look at what happened to the budget requests that were made. Since 1982 when HNIS was established as a line item in the budget, Congress has only twice funded the agency up to the amount requested in the President's budget. This includes the FY 89 budget.

Yes improvements need to be made. Yes, the departments need, want, and even now get outside expert advice. They often heed that advice. Yes, the data must be evaluated and provided in a useful form to policy makers as is being done through the second nutrition monitoring evaluation report. Yes, better methods need to be developed. Both USDA and DHHS recognize this and fund such research continually. I am not optimistic that this research will result in the cost savings touted by the bill sponsors. Experience with improvements in medical technology often go in the opposite direction. Cooperation with state and local officials is important and both departments are increasing efforts in this area. However, I am not confident that having 50 states collect the data needed by Federal policy makers is feasible. Still, the Federal sector should work with state and local officials to share knowledge and understand their needs.

As a young scientist I was taught that simplicity is a virtue to always be strived for in designing experiments. If you are interested in my advice, it is simplify the legislation. Remove from your bills the nonessential items, remembering that essentiality is sometimes like beauty - in the eye of the beholder. A simple message is one that can be more readily understood and implemented. Then if you don't like the progress, you certainly have the power through oversight hearings and appropriation authority to get attention even of the most stubborn resisters.

1095h

1126 Sixteenth Street, NW
Washington, D.C. 20036
November 9, 1989

The Honorable Charles Hatcher
Chairman, Subcommittee on Domestic
Marketing, Consumer Relations,
and Nutrition
U.S. House of Representatives
Room 1301
Longworth House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

I have enclosed my answers to the questions sent to me following the joint hearing on nutrition monitoring held on September 21, 1989. I appreciate the opportunity to respond to your inquiries and hope my answers will be helpful to your deliberations.

Sincerely,

Suzanne S. Harris

Suzanne S. Harris, Ph.D.

Enclosures

1167h

Question 1. As a former Deputy Assistant Secretary of a Federal agency involved in nutrition monitoring activities where do you believe improvements can be made by the Federal government in nutrition monitoring? Please describe, based on your experience, how coordination between USDA and DHHS was handled and how it should be handled.

There are very few, if any, government programs where improvements cannot be made. The issue with the nutrition monitoring legislation is not whether improvements need to be made, nor is it what improvements need to be made. The crucial issue is the process by which needed improvements will be identified and implemented. None of the agencies involved in the current nutrition monitoring system have stated that improvements are not necessary. Quite the contrary, the Operational Plan was developed with the need for continuing improvement in the system as the major goal.

More specifically, the Operational Plan sets out the following objectives:

> Achieve a comprehensive system through coordination among NNMS components;
>
> Improve information dissemination and exchange; and
>
> Improve the research base for nutrition monitoring.

Within each of these major objectives are subcategories where improvements are being sought. I am not aware of any major omission from this list, even when the long wish lists of various advocates of nutrition monitoring are considered.

There is one area I would like to highlight for special consideration in the improvement category - better communication between the legislative branch and the executive branch with regard to just exactly what the legislative branch wants from the system. The long and sometimes divisive struggle over the legislation has made candid discussion of what is currently being done and what is possible in the future, given the current fiscal constraints, difficult. Both branches are committed to the same goals and real benefits could be gained from improving communication between the branches. The responsibility for such improvement is bilateral.

As for coordination between USDA and DHHS, it is handled on multiple levels as has been described to you by the agencies many times. The structure is all there - at the staff level, at the interagency level, and at the policy level. But true coordination takes more than structure. It requires understanding of and respect for each other's positions. This has been and remains difficult to achieve. I have seen small signs of progress and I am confident that with more practice, coordination will improve. Forcing a cumbersome superstructure, as in H.R. 677, on top of this coordination effort will not be an effective solution.

Question 2. Over the past several years many witnesses have testified about the need for more efficient methods of collecting data and better standards for comparing data. Do you agree? If so, what should be done to accomplish this?

Once again there is no debate on the need for improving data collection methodologies or the need to develop additional standards for evaluating data. How to accomplish these goals is the difficult part. One important obstacle is that such research is not considered glamorous, for lack of a better term. Scientists, like any other group of professionals, are driven to some degree to research areas where there is monetary support and likely recognition for a job well done. Both are lacking in the areas of survey data collection methodology and nutritional status standards.

These types of research are expensive and time consuming. The USDA Agricultural Research Service (ARS) has ongoing programs in these areas and they are being responsive to the needs of the monitoring agencies. The Human Nutrition Information Service has an ongoing reseach program aimed at improving dietary intake methodology. This program is coordinated with the ARS research program. Continued support, i.e. funds and acknowledged interest in their output, will be beneficial to progress in this area.

Question 3. Are the nutritional status data collected by the Federal government acceptable or useful to State and local health departments? Are there real differences between States in terms of nutritional status?

First, the Federal monitoring data are useful and acceptable to the State and local health departments. These data provide an overview of information about population subgroups who are represented in each state. Certainly nutritional status is not dependent on state boundaries. At the same time some subgroups are not well covered by the large surveys and some states have a larger percentage of these subgroups in their populations.

For example, American Indians living on reservations are not covered by the current surveys. For some states, this subgroup is an important component of their overall population. The solution to the problem is a special survey for American Indians living on reservations. Such a survey could be designed to meet the specific needs of public health officials who are charged with addressing the nutritional needs of such a subgroup. A special survey is, in this case, the most cost effective way to provide information that is not well covered in the larger surveys.

Caution needs to be added before everyone says their state has such special groups. The current system provides a wealth of information and it is prudent to explore the use of readily available data thoroughly before setting up an additional survey. All too often, States seem to be demanding state specific data without fully justifying the need.

Question 4. Do you make specific use of the data collected by the Federal government in your current position and how helpful are these data?

The answer is yes, I use them and they are extremely helpful. They are the only game in town. In my current work, I am interested in eating patterns, food composition data, nutrient intake of various subpopulations, and how these are related to scientifically sound dietary advice. The USDA data base is a gold mine of information. The ongoing Continuing Survey of Food Intakes by Individuals (CSFII) will be extremely useful to the understanding of dietary trends. For example, as more macronutrient substitutes are introduced into the food supply, it will be very important to monitor the penetration of these products into the dietary patterns of various subpopulations and what impact the consumption of these products will have on overall nutrient intake.

The Diet and Health Knowledge component of the CSFII will be very important to our understanding of the relationship between knowledge and action. I am very excited about the data that is becoming available for use this year and in the near future.

In my current position the data collected by the Department of Health and Human Services' National Health and Nutrition Examination Survey (NHANES) is not as useful because it is focused on nutritional status measurements and has less information about dietary intake. I have made use of data from the Total Diet Study and the Food Label and Package Survey conducted by the Food and Drug Administration.

Question 5. You indicated that legislation could do more harm than good. Please be specific on why you believe this to be true.

My comments have been directed at specific legislation, H.R. 677 and S. 253, not legislation in general. Certainly it is possible to develop legislation that would be very beneficial to the overall goals. Such legislation would need to be less prescriptive than H.R. 677 or S. 253.

I believe H.R. 677 and S. 253, if enacted, will result in additional significant burdens for those agencies for whom nutrition monitoring is a primary function. The Census Bureau and the Bureau of Labor Statistics are obvious examples of agencies whose primary function is not nutrition monitoring. The agency I know best, the Human Nutrition Information Service, does have nutrition monitoring as a primary function. For them, and I believe for others, H.R. 677 and S. 253 will be a significant burden on resources, both monetary and staff resources.

As specific examples, I offer the following. Both H.R. 677 and S. 253 require a nine member advisory council to assist in carrying out the purposes of the Act, to provide scientific and technical advice on the development and implementation of the coordinated program and comprehensive plan, and to serve in an advisory capacity to the Secretaries. Though this sounds great on the surface, I urge you to look realistically at how this group would function.

First of all, there will be an enormous education process to bring all nine members up to the same level of knowledge about the various components of the nutrition monitoring system. The advisory council is charged, among other things, to provide scientific and technical advice on the development of the comprehensive plan. Since the plan is due within twelve months after enactment of the bill and the advisory council is to be appointed within 90 days of enactment, it is likely that the agencies will have no more than 6 to 8 months in which to bring the council together, provide the members with detailed knowledge of what is now going on, what is planned, and what is feasible to change, as well as to find out what recommendations the advisory committee would like to offer. This is a formidable task even if money and staff time where plentiful.

Neither are. These bills provide no money for the advisory council. Since the advisory council is not required under current statute, USDA has no money set aside in its advisory council budget for this one. This means USDA would not be able to pay for the members' travel to meetings nor their per diem hile in Washington. In addition to these resources, past xperience has shown that the staff resources necessary to support an advisory council are substantial. For example the Joint Nutrition Monitoring Evaluation Committee required 4 FTE's from USDA and a similar amount from DHHS. That may not seem like much, until one considers the agency's size. The Human Nutrition Information Service has only 90 total staff years. So this one advisory council would require the commitment of more than 4 percent of their total staff time.

And this is only one committee. There will also be a committee of some sort working on the scientific evaluation of the data generated by the system and the Dietary Guidelines Advisory Committee is in place for two out of every five years. It is a bit excessive to have between 4 and 12 percent of the agency staff tied up in servicing advisory committees.

Beyond the committees, the bills call for an biennial report to Congress - a worthwhile task, but one that requires time and resources. The advisory council must write an annual report. Usually, the agency staff provides the support to prepare this report as well.

In the meantime, the resources taken to service the committees and write reports are removed from the monitoring activities themselves. The result will be delays in analyzing the data from the 1987-88 Nationwide Food Consumption Survey and the 1989 Continuing Survey of Food Intakes by Individuals. It may also mean reduction in funds available for research in survey methodology. This is the harm I referred to in my testimony. To me the potential harm of reduced analysis and research is far more important than the potential for benefit from the nine member council and additional reports.

Legislation that requires a formal process for gathering outside advice without prescribing exactly what that process will be is a more appropriate course of action. Such legislation would still require the agencies to have a process for gathering outside advice, but allows them to choose the most efficient mechanism.

Question 6. Neither the Nutrition Monitoring Implementation Plan nor the more recent Operational Plan prepared during your tenure at USDA identified the resources required to implement the plans by activity, by agency, or by fiscal year. Other interagency research such as ground water, global change, and high performance computing have submitted interagency research plans and associated budgets. Why was this not done for nutrition monitoring?

The simple answer is because I did not see how we could offer more than the current fiscal year budget and the President's proposed budget for the next fiscal year. This information is readily available by activity, by agency and for the two fiscal years named. In terms of long range planning, the Operational Plan lists proposed activities through 1995, so obviously the agencies are planning for these in their budget requests.

I must add that this question has always seemed to me to be a chicken and the egg question. If no money is appropriated by Congress, then the activities will not be undertaken. If Congress appropriates funds for a specific task, then it will be undertaken. To ask the Administration to forecast detailed budgets for nutrition monitoring five to ten years into the future seems to me to be a waste of time, for those who prepare it and those who read it. Administrations change and so do priorities, many of which have nothing to do with nutrition monitoring. Yet once down on paper, these forecast budgets take on a life of their own, thus hampering the President's ability to set his or her own policy agenda with accompanying budget.

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Prepared Statement

of

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for the

JOINT HEARING ON NUTRITION MONITORING LEGISLATION

before the

SUBCOMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH, AND FOREIGN AGRICULTURE

and the

SUBCOMMITTEE ON DOMESTIC MARKETING, CONSUMER RELATIONS, AND NUTRITION

of the

COMMITTEE ON AGRICULTURE

and the

SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY

of the

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

September 21, 1989

Room 1300, Longworth Building

Outline of
Prepared Statement

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I. INTRODUCTION

My name is Kenneth D. Fisher. I am the Director of the Life Sciences Research Office (LSRO) of the Federation of American Societies for Experimental Biology (FASEB). I am accompanied today by Dr. Susan M. Pilch, Senior Staff Scientist. Let me express our sincere appreciation to the Committees for the opportunity to present a brief review of the report, *Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring*, which the Life Sciences Research Office of the Federation recently completed for the Department of Agriculture and the Department of Health and Human Services. It is our understanding that you are primarily interested in: 1) the process used to achieve the objectives of the study, foster cooperation among the Departments, develop a consensus on interpretation of the data, and incorporate the views of the members of the expert panel; 2) the recommendations of the report; and, 3) our comments on future needs and objectives of the National Nutrition Monitoring System.

Because of the scope of topics you have identified, we are submitting for the record, a written statement that provides more detailed information on the above topics.

The Federation was formed in 1912 and now consists of seven major scientific Societies. Membership of the constituent Societies includes approximately 32,000 scientists in the disciplines of physiology, biochemistry, pharmacology, pathology, nutrition, immunology, and cell biology. The purposes of the Federation are to bring together investigators in the biomedical sciences and to disseminate information on the results of basic and applied research in the life sciences.

The Life Sciences Research Office was established in 1962 by the Federation to undertake analyses of specific issues and problems in biology and medicine confronting research program administrators in Federal Agencies. The Office provides evaluation of scientific issues and topics with the assistance of expert scientists, most of whom belong to one or more of the Constituent FASEB Societies. LSRO review studies are ad hoc and participating scientists are selected by LSRO on the basis of their specific expertise in a scientific discipline and their freedom from conflict of interest. Emphasis in LSRO studies is placed upon the development of a sound, scientific, factual basis for subsequent administrative decisions by the sponsoring organization.

II. *NUTRITION MONITORING IN THE UNITED STATES: AN UPDATE REPORT ON NUTRITION MONITORING*

A. Contract Objectives

The first report on the National Nutritional Monitoring System *Nutrition Monitoring in the United States*, was prepared during the period 1983 to 1986 by a four-person panel, assisted by the scientific staff of the Department of Health and Human Services and U.S. Department of Agriculture. Mindful of the time and effort required, the Agencies sought assistance outside the Federal Government in preparing the second report.

The second report, *Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring*, was prepared by the Federation of the American Societies for Experimental Biology under contract to the Department of Health and Human Services and U.S. Department of Agriculture during the period October 1987 to July 1989. The report will be available publicly in the near future. The objectives of the competitively awarded contract ($598,533) were to acquire the services of a professional scientific organization to accomplish the following:

- Conduct a scientific review and assessment of data and information available through the National Nutrition Monitoring System and other sources on the dietary and nutritional status of Americans, and
- Deliver findings and conclusions in a report (content and format specified) that will serve as the scientific basis of the joint report that DHHS and USDA will submit to Congress in 1989.

The topics in the report include 1) an update of the dietary and nutritional status as presented in the first, 1986 report and, 2) an in-depth analysis of two examples of the National Nutritional Monitoring System health and dietary data. The first was represented by data on the relationship of diet to a chronic disease--specifically, nutritional factors in cardiovascular disease, and the second by data on a dietary and nutritional issue, assessment of iron nutriture.

B. Procedures Employed to

1. Achieve Objectives

Under terms of the Contract, procedures were established to facilitate achieving the objectives. These included:

a. Provisions for support of the Contractor's scientific and technical staff to collect, collate, analyze, and review data from components of the National Nutrition Monitoring System.

b. Provisions for the Contractor to organize and independently manage a panel of non-Federal expert scientists to review and evaluate data from the National Nutrition Monitoring System. The knowledge and experience of the consulting scientists encompassed the topical areas represented in National Nutrition Monitoring System data including clinical nutrition, public health and community nutrition, epidemiology, statistics, agricultural economics, behavioral sciences, and nutritional biochemistry.

c. Resources for the Contractor's scientific staff to draft a report derived from data generated by the National Nutrition Monitoring System and for the expert panel to meet, discuss, evaluate data, and recommend conclusions for the report.

d. Organization of a Joint Project Steering Committee composed of representatives of all DHHS and USDA Agencies that contribute to the National Nutrition Monitoring System. The Joint Project Steering Committee met monthly with the Contractor's scientific staff to discuss progress on preparation of the report, to relay the needs of the Contractor and its expert panel to the appropriate Agency, and to coordinate the Agency responses to requests for data and data analyses.

2. Foster Cooperation Among Departments

The contract established clearly that the Federation's Life Sciences Research Office was an independent, external entity responsible for preparation of a report. Thus, we were able to use techniques developed since 1962 for preparation of scientific reports. These techniques share several common attributes, specifically, scrupulous attention to scientific objectivity, inclusion of all relevant information, and continued focus on documentation and interpretation of facts.

As a professional scientific organization with little vested or self-interest in the conclusions of the report and with a recognized reputation for scientific objectivity, we were able to require all parties in the study to adhere to our requirements for comprehensive review of scientific literature and data, careful documentation of scientific facts, and objective evaluation of scientific data and information. Early in the negotiation of the Contract with the Federal Government, we spelled out in considerable detail the procedures and roles assigned to all participants. These provisions identified what the staff of the Life Sciences Research Office would do, how the Life Sciences Research Office would manage its panel of expert scientists, and what was expected of the Joint Project Steering Committee and the Agencies it represented. Cooperation was also fostered by open and frequent communication about progress and problems, by absolute honesty in relaying expert panel thoughts to the Joint Project Steering Committee and those of the Agencies back to the panel, and by constant attention to even-handed treatment of data.

Because these provisions were developed cooperatively and carried out with a spirit of mutual trust and respect for the needs of the Agencies and the independence of the Contractor, few problems occurred during the 22-month period. In a few instances, the Contractor or Chairperson of the Joint Project Steering Committee reminded the Departmental staff of the agreements reached in October 1987. I can honestly state that we had the full support of the Joint Project Steering Committee in this activity.

3. Develop a Consensus on Data Interpretation

Inherent in the scientific review and evaluation techniques employed by an independent scientific body such as the Life Sciences Research Office, is the opportunity for free and open exchange among expert scientists in interpretation of scientific data. During preparation of the report, *Nutrition Monitoring in the United States: An Update on Nutrition Monitoring,* few if any issues were raised that did not result in agreement on interpretation of data. Had there been issues of interpretation where no consensus was reached, our study techniques, and indeed the scientific method and the process of peer review itself require that all interpretations be critically documented and supported by scientific evidence. When required, LSRO's scientific staff incorporate the interpretations and documentation into the report.

4. Incorporate Expert Panel Views

The reports prepared by the Life Sciences Research Office are written by staff scientists and are based on views and interpretations of data provided by the scientists who consult for us and who serve on our expert panels. Expert panel members review, and staff scientists revise, draft reports as appropriate. Thus, the Federation develops its reports from the knowledge and experience of scientists who are experts in various disciplines.

The Federation requires that our procedures also incorporate critical review of draft reports by other scientists appointed by the Governing Board of the Federation. This peer review, as well as peer review by additional consultants as appropriate, ensures scientific accuracy, objectivity, and balanced presentation of the scientific topic.

C. Recommendations of the Report

We have been informed that the report, *Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring*, completed July 31, 1989, will be delivered from the printer on or about October 1, 1989. In the interim we are providing the text of Chapter 7 (Recommendations) of the final report as Appendix B.

Major recommendations include:

- Concurrence with the recommendations of the Joint Nutrition Monitoring Evaluation Committee (1986) and the Coordinating Committee on Evaluation of Food Consumption Surveys of the National Research Council (1984).
- Further efforts to incorporate greater comparability and compatibility among components of the National Nutrition Monitoring System in future surveys.
- Increased efforts to assess population groups not included in previous surveys and increase representation of population groups already being surveyed.
- Specific recommendations and suggestions on needs for collection of dietary data in the next Health and Nutrition Examination Survey, education of data users, increased responsiveness to needs of state and local data users, and resources to support research on methodology useful in nutrition monitoring.
- Modification of the frequency and format of reports on the National Nutrition Monitoring System to respond more efficiently to the needs of Congress and the scientific and public user communities, as well as to make better use of the resources of the Department of Health and Human Services and United States Department of Agriculture. Specifically, brief update reports should be prepared at regular intervals. Comprehensive update reports should be prepared when major survey data sets are available for interpretation. Reports of detailed analyses on special topics should be prepared separately from comprehensive update reports, preferably using outside expertise.

D. Future Needs and Objectives of the National Nutrition Monitoring System

The primary goal of the National Nutrition Monitoring System should be to meet the needs of data users, especially policy makers. They are responsible for protecting the public health and containing health costs. Promotion of health through proper nutrition is less costly than treatment of disease. For these reasons alone, the timely collection and interpretation of data from the National Nutrition Monitoring System is needed. Because the National Nutrition Monitoring System provides data on food and nutritional status, it plays a major role in maintenance of health and prevention of poor nutrition. In this regard, one example of an emerging objective is the need for the data to evaluate progress on implementing the National Nutrition Objectives and other nutrition related *Health Objectives for the Year 2000* at the midcourse review (1995) and at the end of the decade. Another continuing objective is the use of National Nutrition Monitoring System data in determination of needs for various Federal food intervention programs.

One approach to the primary goal would be to put into place a mechanism by which data users could identify unmet needs. Then, strategies to meet these needs could be developed and cooperation among the Agencies from the highest to the lowest levels could be required. However, experience indicates that it may not be possible to address the multitudinous and competing requirements of the user communities. Nevertheless, with direction, the best features of the existing National Nutrition Monitoring System such as those that provide useful data within the limits of scientific methodologies, on food use, nutrient intake by major population groups, and many aspects of nutritional status can be retained and improved. Given adequate resources and continuing cooperation among Agencies, an even better system, in which the separate components function together more effectively, can be developed.

Our experience in preparing the second report on nutrition monitoring using data from the National Nutrition Monitoring System indicates that the National Nutrition Monitoring System does produce data useful in preparing periodic update reports and in addressing major topical issues in which diet and nutrition influence the health of the U.S. population. However, our experience also suggests that other dynamic factors such as the accumulation of data from past and ongoing monitoring efforts; the development of additional useful measures of diet, nutrition and health status; better methods to monitor nutrition and health status; and the changes in the demographic characteristics of the population itself continue to have major impacts on the National Nutrition Monitoring System. As more data are available, more extensive analyses can be undertaken. As more and better measures of nutritional health become available, pressures for their inclusion in surveys will increase. As the characteristics of the U.S. population change, policy makers and other data users will demand additional data analyses. Because of these factors and events, it is reasonable to assume that the National Nutrition Monitoring System will continue to require increased resources and support. But these predictable events also provide a basis for continued reassessment of the goals of the National Nutrition Monitoring System. If such a system is to succeed, its goals must be defined and stated clearly. Similarly, the resources to accomplish these objectives must be made available.

(Attachments follow:)

APPENDIX A

A. Description of the Federation

Brochures describing the Federation of the American Societies for Experimental Biology, its organization, history, and resources have been provided to the Staff Director of the Subcommittee on Domestic Marketing, Consumer Relations, and Foreign Agriculture. The descriptive brochure is also available from Dr. Fisher (301/530-7030).

APPENDIX B

Excerpt from *Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring*, prepared for the U.S. Department of Agriculture and U.S. Department of Health and Human Services by the Life Sciences Research Office of the Federation of American Societies for Experimental Biology, July 1989.

Chapter 7

Recommendations

The EPONM was charged to recommend ways to strengthen the NNMS based on experiences involved in reviewing data analyses for this report. In deciding how to frame their recommendations, the EPONM reviewed the recommendations for improving the collection, dissemination, and usefulness of NNMS data offered by the JNMEC (DHHS/USDA, 1986) and the Coordinating Committee on Evaluation of Food Consumption Surveys (National Research Council, 1984). The EPONM finds that the conclusions of these groups, which dealt mainly with the HANES and NFCS, remain timely and of continued importance. In recently completed surveys (NFCS 1987-88) and in surveys currently in the field (NHANES III, CSFII 1989), progress has been made in implementing some of these recommendations, but most of the suggested changes were not reflected in the data available to the EPONM. In addition, both the USDA and DHHS have developed plans for survey activities, to a large extent, through 1995; thus, recommendations offered now may not be implemented for some time. As a result of this Panel's deliberations, we wish to emphasize the following general areas: comparability and compatibility among components of the NNMS; needs for data collection, analysis, and dissemination; and future reports on the NNMS. (Specific recommendations related to dietary and nutritional status in cardiovascular disease and to the assessment of iron nutriture are included in chapters 5 and 6, respectively.)

Comparability and Compatibility Among Components of the NNMS

The EPONM's objective of integrating data from the NNMS survey and surveillance activities was constrained because of differences among the various data-collecting activities. The different programmatic obligations and logistical requirements of the Agencies make it impractical to suggest that data collection methodologies should be identical in all survey and surveillance activities. They do not, however, preclude more serious efforts to improve the comparability of data. Because the EPONM was not informed about the details of content and methodology in the current and planned surveys, it is difficult to be specific in recommending many changes to improve comparability, but some particular concerns and suggestions arising from experiences in preparing this report are discussed below.

In the past, USDA and NCHS developed the nutrient composition databases for the NFCS and HANES independently. Because of this and other methodological differences, it has been impossible to determine the reason(s) for differences in nutrient intake between surveys conducted at the same time. The situation changed with the CSFII 1985-86 and HHANES; in fact, the most recent NFCS 1987-88 and the current CSFII 1989 and NHANES III all use the same food codes, descriptors, and nutrient composition data. However, there are still differences as to whether various food mixtures (such as casseroles) are coded as standard recipes or as separate ingredients reported by the respondents. Such differences in coding may introduce discrepancies in apparent nutrient intakes (especially for type of fat and amount of sodium) that may or may not be related to real differences in nutrient intakes. The Panel favors introducing greater similarity in data collection methods. As long as methods differ, questions will continue to arise about the comparability of data. In such cases, studies evaluating the effects of methodological differences on the data gathered should be conducted jointly by USDA and NCHS. If the goal of greater integration of the components of the NNMS is to be achieved, resources must be allocated to the conduct of such studies and the results should be made readily available to the community of data users.

The same situation is true for changes in methodology within surveys over time. Information is needed on the impact of any such changes, which are instituted to improve the accuracy or efficiency of data collection, on the resultant data. For example, comparison studies are usually conducted when new analytical methods are introduced for blood chemistry measurements in the HANES. The analyses performed by Perloff (1988a,b) on the impact of changes in the nutrient database between the NFCS 1977-78 and the CSFII 1985-86 and the ongoing USDA 1988 Bridging Survey evaluating methodology changes between the NFCS 1977-78 and the NFCS 1987-88 also represent the types of studies needed if the NNMS is to achieve one of its important objectives of assessing changes in diet and nutritional status over time. Results of these studies should be made more readily available to data users.

The Panel recommends introduction of a common core of sociodemographic descriptors in all NNMS surveys to enhance the capacity to establish linkages among surveys (USDA and NCHS currently use many common descriptors). For example, if groups could be characterized by age, race, income, and education on the basis of the same descriptors, knowledge and attitudes of specified groups assessed in the BRFSS or the Health and Diet Study could be related ecologically to dietary intakes of the groups in the NFCS characterized in the same fashion. With improved capability for linking survey results, the need to add additional measures to individual surveys could be reduced.

The Panel also noted that the capability of more thorough and complete comparisons from various components of the NNMS would be enhanced if there were greater similarities in data reporting from various Agencies, for example, using the same age groups. The Panel recommends that the Agencies coordinate data reporting to the extent possible.

Needs for Data Collection, Analysis, and Dissemination

Coverage of Groups Currently Excluded

The sampling plans of many NNMS surveys necessarily exclude some groups of the population. Nationally representative samples of the civilian noninstitutionalized population exclude military personnel, persons living in institutions such as prisons and long-term care facilities, Native Americans living on reservations, and persons without fixed addresses (migrant workers and the homeless). Conclusions of the EPONM about the rarity of nutritional deficiencies in the United States were made cautiously because of the exclusion of some groups suspected to be at higher risk of being malnourished (notably the homeless and the institutionalized elderly). Assessments of at least some of these excluded groups are necessary if statements about the nutritional status of the entire U.S. population are desired. Special-purpose surveys may be a more efficient mechanism for obtaining information about these groups than their inclusion in one of the existing surveys. Special methodologies will need to be developed for sampling (in the case of the homeless) and for collecting dietary intake and medical history information (from the mentally impaired elderly) in order to provide assessments for some of these groups.

Improved Coverage of Groups Currently Included

The EPONM noted limitations in the information available for several groups of particular interest surveyed in the NNMS. These included young infants, children, pregnant women, lactating women, and the elderly.

- Relatively small numbers of infants, pregnant women (including teenagers), and lactating women are included in the nationally representative samples of the entire population. Surveillance activities of the CDC that focus on women and children do not provide representative samples because they generally select only low-income subjects. Even if larger numbers of infants, pregnant women, and lactating women were included in existing cross-sectional surveys, assessments would still be limited because the rapid changes undergone by these groups require analyses by narrow age groups or short time periods (such as trimesters) for appropriate analysis of status. Infants double their body weights in the first 3-4 months of life and experience many changes in the types of foods consumed over a short period of time: breast milk or formula in the first 3 months, some solid foods introduced during months 3-6, and table food in months 6-12. They represent a group at high risk because of the potential that long-term adverse developmental consequences may be the result of undernutrition early in life. Similarly, pregnant women undergo many physiological changes in a short period of time and undernutrition during pregnancy can have a profound influence on the development of the fetus and the health of the pregnant woman, while nutritional requirements and status differ greatly by trimester. High nutritional requirements are also imposed by lactation. These considerations convinced some of the EPONM that longitudinal studies of nutritional status in representative samples of these groups would be useful and advisable. Other members of the EPONM believed that such studies were more appropriate in a clinical setting than in the surveys of the NNMS.

- The elderly are also a group that may be at risk of malnutrition because of physiological changes, physical or mental impairments, or social factors. This group has not been adequately represented in all NNMS surveys, little is known about how their nutritional requirements may differ from younger adults, and their numbers are increasing rapidly. There has been no upper age limit in most of the dietary surveys conducted by USDA. The CSFII 1985-86 included no adults older than 50 years, but the current and future CSFII will include persons of all ages. In the past, HANES excluded persons older than 74 years, but NHANES III has no upper age limit. Elderly persons should be sampled in sufficient numbers to permit assessment of subgroups, for example, "elderly" (65-74 years), "aged" (75-84 years), and "very old" (85 years and over).

- Children aged 1-5 years also represent a group vulnerable to malnutrition and disorders related to diet and nutrition, such as dental caries and lead poisoning. One particular concern of the EPONM with respect to this group was the validity of proxy reports on dietary intake, especially in the case of parents reporting the intakes of children in day care or in school. Efforts should be made to test the validity of such reports or to find alternatives for obtaining intake information.

- Some members of the EPONM concluded that adolescents also represent a group at nutritional risk. Some of the factors related to concern about this group are the different levels of maturation, the nutritional requirements of the adolescent growth spurt, the frequency of eating away from home, the prevalence of dieting and eating disorders, and the nutritional demands of teenage pregnancy.

Dietary Data in the HANES

One-day dietary data, such as those collected in the HANES, do not provide information on the distribution of usual intakes; thus, a meaningful assessment of the cross-sectional association of dietary intake and health status cannot be made. Increasing the number of days of data collection would permit some assessment of intraindividual variation in intake and improve estimates of usual intake. Limitations would still exist in examining cross-sectional associations of diet and health status (see chapter 5); however, improved dietary intake data would be very helpful for planned followup studies of HANES populations.

Knowledge and Attitudes

Some members of the Panel recommended that questions on dietary and nutrition knowledge and attitudes be included in surveys that estimate usual dietary intake or dietary pattern. In the data available for this report, the EPONM found little information relating knowledge and attitudes to practices.

Vitamin and Mineral Supplements

The Panel could not evaluate total nutrient intake using the available data – none of the available surveys that assess nutrient intake from food include quantitative estimates of nutrient intake from supplements. The ability to examine excessive intakes, and possibly to assess consequences of nutrient toxicity, would be enhanced if such measures were included to provide more accurate assessments of total levels of nutrients consumed. Such information would also shed light on whether the dietary intakes of some nutrients are truly marginal.

Alcohol Consumption

Alcohol intake can influence dietary intake, nutritional status, and health status. The EPONM noted limitations in survey data on individual alcohol intake currently available. The HHANES included an extensive questionnaire on alcohol use, but data were not available to the Panel. The EPONM recommends that efforts be continued to improve the quantitative assessment of alcohol intake in NNMS surveys.

Nonresponse Analyses

In its analyses of the available data, the EPONM was concerned about the possibility of bias in national estimates because of nonresponse in the surveys. The Panel was reluctant to use some of the data in which response was less than 50 percent. Therefore, the Panel recommends that every effort be made to improve current response rates. Methods for improving response rates, such as monetary and other incentives, should be tested, especially in the USDA surveys in which such techniques have not been attempted. Current efforts to collect as much information as possible on nonrespondents by increasing the information collected in screening questionnaires, performing followup studies of nonrespondents, and conducting proxy interviews to obtain information on nonrespondents should be extended. The USDA and NCHS have conducted detailed analyses of nonresponse (discussed in the current report) in their recent surveys; such analyses should be made available to data users.

Education of Data Users

The EPONM noted that some of the published reports based on NNMS data, primarily those produced by investigators using public release data tapes or working under Agency contracts, failed to use appropriate procedures to account for sample weights and design effects inherent in these complex surveys. Thus, the EPONM strongly recommends that the Agencies continue and increase efforts to educate users on appropriate use of survey data. These efforts may take such forms as publications on statistical issues, workshops, and/or greater documentation for data tapes made available to investigators, and may require additional Agency staff with statistical expertise. In those situations where analyses are proposed as part of a contractual activity, it is incumbent on the funding Agency to ensure that the review of such proposals include an evaluation of the understanding and ability of the investigators to analyze data from a complex survey.

Responsiveness to Needs of State and Local Data Users

The Panel was aware of a desire by public health personnel in many States and localities to use NNMS data. The CDC surveillance activities are State-based, but the nationally representative surveys do not generate State- or local-level data. Nonetheless, policy makers in the States and localities need to know how to use national data, the implications of national data in terms of the State or locality, and how to "dovetail" State or local surveys more efficiently with national surveys. State and other officials who are responsible for implementation of the National Nutrition Objectives need ways to monitor status and progress in achieving these objectives. The Panel encourages more interaction of Federal and State data collection activities and research on the value and validity of synthetic estimates for States and other localities.

Research Needs

The EPONM noted many research needs in the course of reviewing the analyses included in this report, but wishes to highlight two issues:

- Development of methods for the assessment of dietary adequacy (and nutrient excess) to reduce reliance on the RDA as a standard for nutrient intake.

- Development of measures of status for food components identified as current public health concerns, such as calcium. Improved and/or validated measures of obesity, energy intake, and physical activity are also needed.

Future Reports on the NNMS

The integration of the currently available dietary and nutrition-related health status data from the two major surveys of the NNMS (the NFCS and the HANES) to assess the dietary and nutritional status of the U.S. population is a major contribution of reports such as this one and that of the JNMEC. Data from these surveys and other NNMS sources can also be used to provide a detailed analysis and summary of specific issues related to diet, nutrition, and health. The Panel's experiences, as amplified below, indicate that presentations of both updated information on status and detailed analyses are appropriate, valuable, and feasible objectives for such reports.

Content of Reports

The EPONM recommends that reports presenting updated information on dietary and nutritional status and reports presenting detailed analyses on special topics be prepared separately. In the Panel's experience, trying to accomplish both in the same report was overly ambitious.

- Update reports may take a variety of forms. One option is a relatively comprehensive discussion and analysis of available dietary and nutritional status data containing conclusions regarding public health significance and monitoring priority, such as the JNMEC report and chapters 3 and 4 in the current report. Another possibility is the tabulation of the most recent data, with limited interpretation, in a format similar to that used for *Health: United States*. These two alternatives are especially appropriate in view of the increasing trend for continuous data collection in the NNMS. Consideration might also be given to studying the development of a set of "leading indicators" (similar to leading economic indicators) that potentially could rapidly monitor changes in food consumption and nutritional status of the population. Such indicators need not be direct measures of food consumption or biochemical measures related to nutritional status, but might consist of data already collected for other purposes, such as food expenditures or participation in food and nutrition programs, that may reflect dietary and nutritional status.

- Reports of detailed analyses on special topics could alternate with update reports or could be prepared concurrently (but separately, as the need for such reports is identified and the data become available). For such reports, the assistance of consultants with a wide range of expertise within the specified subject area would be most helpful. The types and depth of expertise needed would differ for different topics. Some topics for consideration are listed below (not all of these topics could be undertaken with existing data).
  - The impact of supplement use on nutrient intake, nutritional status, and health status.
  - The nutritional and dietary status of the elderly.
  - The impact of consumption of food away from home on dietary status.
  - The impact of social changes such as single-parent and two-income households on dietary practices and nutritional status.
  - The impact of "dieting" behavior on dietary patterns and nutritional status.

Frequency of Reports

Difficulties in interpretation arise if update reports are prepared too frequently: little detectable change in dietary or nutritional status of the population would be expected in short time periods and appropriate data for desired analyses may not be available at short intervals. The latter was true of the EPONM's review; the major sources of data available for the update of dietary and nutritional status were limited in coverage of age and sex groups (CSFII 1985-86) and ethnic groups (HHANES). In addition, analyses of dietary intake data from HHANES were not completed for the EPONM review. These factors limited the ability of the Panel to meet the charge to update information on the nutritional status of the U.S. population and raised concerns about the timeliness of data release from some surveys. Planned schedules for release of data from current surveys will resolve concerns about the timeliness of data available, provided that the Agencies are allocated adequate staff and resources to meet the planned schedules. Reports intended to update information on the nutritional status of the U.S. population should be timed according to the availability of data from the two major components of the NNMS. Thus, the next major update report should be planned to incorporate data from the first half of NHANES III (1988-91), the NFCS 1987-88, and 1989-91 cycles of the CSFII (all of these data should be available in 1993). In addition, the most recent food supply data and data from other NNMS activities should be included. In intervening years in which reports on the NNMS are mandated, more limited update reports or reports on special topics should be prepared.

The NNMS of the Future

The recommendations above are predicated on the Panel's experiences in analyzing the NNMS data in this report, the recognition that most suggested changes cannot be made in ongoing surveys for several years, and the probability that the basic structure of the NNMS will remain the same. The EPONM believes that it is appropriate now to begin efforts to determine the most useful form of the NNMS in the future. The main considerations that should drive the introduction of changes to make the separate components function more effectively as a system are the needs of data users, especially policy makers. One obvious need is for data that permit the assessment of progress on implementing the National Nutrition Objectives for the Year 2000 at the midcourse review (1995) and at the end of the decade. Planning for the future of the NNMS should include a poll of data users to determine unmet needs and should proceed with cooperation between the Agencies from the highest to the lowest level. With such direction and cooperation, the best features of the existing NNMS can be retained and an even better system can be constructed.

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APPENDIX C

Biographical Sketch

KENNETH D. FISHER

Born March 3, 1932, Lowell, Massachusetts; attended public schools, New Britain, Connecticut; graduated from Mount Hermon School (1949). Attended Oberlin College; was graduated from the University of Vermont, B.S. (1953), M.S. (1955), and North Carolina State University, Ph.D. (1960).

Positions held: Assistant Professor, Plant Pathology, South Dakota State University (1960-1963); Assistant Professor, Botany, University of Vermont (1963-1966); Plant Pathologist and nematologist, Vermont Agricultural Experiment Station (1966-1968); Research Associate, Life Sciences Research Office, Federation of American Societies for Experimental Biology (1968-1975), Associate Director (1975-1977), Adjunct Professor of Biology, Montgomery College (1975-1986). Currently: Director, Life Sciences Research Office, FASEB (1977-present).

Educated in the basic and applied aspects of biological science, Dr. Fisher has combined his knowledge of agricultural and environmental sciences with his interests in the life sciences. He has held several academic appointments that include experience in research, teaching and administration of plant pathology, microbiology, nematology, and biomedical research. He is the author of 50 scientific papers and technical articles. His education in the agricultural sciences and professional experience in both the environmental and life sciences provide a broad biological background for critical evaluation of scientific problems. He is a member of several scientific societies including the American Institute of Nutrition, American Association for the Advancement of Sciences, American Society for Microbiology, Society of Nematologists, Society of Sigma Xi, Gamma Sigma Delta, and Alpha Zeta. He received a commendation from the Secretary, Department of Health and Human Services in 1980 and in 1982 received a special citation from the Commissioner, Food and Drug Administration.

In his 21 years association with the Life Sciences Research Office, Dr. Fisher worked directly with the Select Committee on GRAS Substances as a scientist and in an administrative role as Director of LSRO. Dr. Fisher has also served as project leader for several efforts on toxicology, molecular biology, nutrition, and food safety, including the recent report of the scientific community's views on progress in attaining the Public Health Service Objectives for Improved Nutrition in 1990, as well as administering contracts from various Federal agencies and private organizations.

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9/13/89

APPENDIX D

Biographical Sketch

SUSAN M. PILCH

Born August 23, 1954, Washington, D.C. Attended St. Michael School, Annandale, Virginia; graduated from Thomas Jefferson High School, Alexandria, Virginia (1972). Was graduated from the University of Virginia, B.A. with Distinction (1976), and Cornell University, Ph.D. (1982).

Positions held: Editorial Assistant, The American Journal of Clinical Nutrition (1981); Assistant Editor, The American Journal of Clinical Nutrition (1981-1982); Associate Staff Scientist, Life Sciences Research Office, FASEB (1983); Staff Scientist, Life Sciences Research Office, FASEB (1984-1986). Currently: Senior Staff Scientist, Life Sciences Research Office, FASEB.

Publications: Author or co-author of 15 scientific reports on nutritional biochemistry, nutritional status, and toxicology.

Membership: American Institute of Nutrition, New York Academy of Sciences, American Association for the Advancement of Science, and Association for Women in Science.

Dr. Pilch has a broad education in the biological sciences and chemistry, with special emphasis on nutritional biochemistry and pharmacology. She has interests in vitamin and mineral metabolism, drug-nutrient interactions, and the role of nutrition in human health and disease. In addition to conducting animal nutrition studies, she has had experience in evaluating scientific research and editing scientific papers.

In her work at LSRO, Dr. Pilch was a co-project leader for an assessment of the iron, zinc, and folate status of the U.S. population based on data collected in NHANES II and for recommendations for measurements to be included in NHANES III. She was the LSRO project leader for studies on the assessment of the vitamin A nutritional status of the U.S. population based on data collected in the HANES, the evaluation of physiological effects and health consequences of dietary fiber, and the scientific review of data from the National Nutrition Monitoring System. Dr. Pilch has also served as a staff scientist on several studies concerning the uses of dietary intake data.

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Corporate Members
AMERICAN PHYSIOLOGICAL SOCIETY
AMERICAN SOCIETY FOR BIOCHEMISTRY AND MOLECULAR BIOLOGY
AMERICAN SOCIETY FOR PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS
AMERICAN ASSOCIATION OF PATHOLOGISTS
AMERICAN INSTITUTE OF NUTRITION
AMERICAN ASSOCIATION OF IMMUNOLOGISTS

Affiliate Member
AMERICAN SOCIETY FOR CELL BIOLOGY

ROBERT W. KRAUSS
Executive Director

JOHN R. RICE, C.P.A.
Comptroller

October 31, 1989

Charles Hatcher
Chairman
U.S. House of Representatives
Committee on Agriculture
Subcommittee on Domestic Marketing,
  Consumer Relations, and Nutrition
Room 1301, Longworth House Office Building
Washington, DC 20515

Dear Chairman Hatcher:

This letter responds to your question of October 17, 1989:

"The Federation of American Societies for Experimental Biology has been responsible for analyzing nutrition monitoring data collected by USDA and DHHS. What are the most recent findings based on your analysis? Additionally, do you see a void in the data that were presented to you--is there, in your view, a need to improve the raw information you received?"

The Federation, under the direction of its ad hoc Expert Panel on Nutrition Monitoring, performed analyses of nutrition monitoring data specifically intended to meet the two requirements of our contract with DHHS and USDA:

- Updating of the dietary and nutritional status of the population as presented in the 1986 JNMEC report, and

- In-depth analysis of the contributions of the National Nutrition Monitoring System to assessment of the status of the population as determined from two types of data--data on diet and chronic diseases (specifically cardiovascular disease) and data on dietary and nutritional problems (specifically iron nutriture).

The major findings based on the analyses reviewed are presented in the Executive Summary of the report *Nutrition Monitoring in the United States: An Update Report on Nutrition Monitoring*. Conclusions from the most recent assessments of dietary and nutritional status in the United States are given on pp. xxiv-xxxi. These findings concern trends in the food supply; individual food consumption and nutrient intake; measures of nutritional status; the prevalence of nutrition-related health conditions; and assessments of knowledge, behavior, and attitudes. Findings regarding the contributions of the National Nutrition Monitoring System to the understanding of dietary and nutritional factors in cardiovascular disease are presented on pp. xxxii-xxxiii, and those related to assessment of iron nutriture are found on pp. xxxiv-xxxv.

In regard to improvements in the raw information provided to us, the most serious limitation in the data that specifically affected our ability to meet the charge to update the JNMEC report was that new national data on the dietary and nutritional status of the entire U.S. population had not become available since 1986. The 1986 JNMEC report emphasized a coordinated review of dietary data from the Nationwide Food Consumption Survey (1977-78) and nutritional and health status data from the second National Health and Nutrition Examination Survey (1976-80). Most of the new data available to our Expert Panel in 1987-88 was for the three Hispanic groups surveyed in the Hispanic Health and Nutrition Examination Survey (1982-84) and for the women and children surveyed in the Continuing Survey of Food Intakes by Individuals (1985-86). Because of the resulting limitations in interpretation, the Expert Panel recommended that future detailed update reports be scheduled when new data from both the Nationwide Food Consumption Survey and the National Health and Nutrition Examination Survey are available. This recommendation is also related to the provisions of the *Joint Implementation Plan for a Comprehensive National Nutrition Monitoring System* adopted in 1981. The plan calls for reports to Congress every three years. It was implicit in our recommendation that when a report to Congress is due and data from both surveys are not available together, the report should not be considered a comprehensive update.

Other limitations seen in the data available to us in 1987-88 were

- Assessments of the nutritional status of pregnant women, infants, and lactating women. Few are included in national surveys; even if numbers were increased, limitations in interpretation would still exist. Longitudinal studies of these groups are preferred because, in a short period of time, they undergo rapid changes that may have lasting consequences.

- Assessment of nutritional status in the elderly. Previously, the upper age limit in the Health and Nutrition Examination Surveys was 74 years. (There is no upper age limit in the third National Health and Nutrition Examination Survey.)

- Exclusion of some groups, such as the homeless and Native Americans living on reservations, from the sampling frames of the national surveys. Special directed surveys, rather than enlargement of national surveys, need to be investigated to assess the dietary and nutritional status of such groups.

- Basis for interpretation of trend data for dietary intakes of individual nutrients. Changes in nutrient composition databases and in survey methodology over time or between surveys of different Agencies have contributed to uncertainty in interpretation. (Efforts to assess the impacts of such changes are underway.)

- Lack of information on total intake of essential nutrients from both foods and supplements. This constraint made interpretation of some data uncertain. (Quantification of nutrient intake from supplements will be possible with data collected in 1987-88 Nationwide Food Consumption Survey and the third National Health and Nutrition Examination Survey.)

- Lack of data for usual dietary intake for persons in whom indicators of nutritional status or knowledge and attitudes are assessed. (Some individuals in the third National Health and Nutrition Examination Survey will have multiple measures of daily intake that will permit adjustments for intraindividual variation in usual dietary intake. Also, a followup to the 1989 Continuing Survey of Food Intake by Individuals will assess nutritional knowledge and attitudes.)

I trust these observations address your questions. If additional information is needed, please contact us.

Sincerely,

Kenneth D. Fisher, Ph.D.
Director
Life Sciences Research Office

KDF/smp

TESTIMONY OF

PATRICIA B. SWAN

PROFESSOR AND ASSOCIATE DEAN OF THE GRADUATE SCHOOL

UNIVERSITY OF MINNESOTA

AT A JOINT HEARING ON NUTRITION MONITORING LEGISLATION

BEFORE THE

SUBCOMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH, AND FOREIGN AGRICULTURE

AND THE

SUBCOMMITTEE ON DOMESTIC MARKETING, CONSUMER RELATIONS, AND NUTRITION

OF THE

COMMITTEE ON AGRICULTURE

AND THE

SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY

OF THE

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

SEPTEMBER 21, 1989

The following groups have indicated their support for Dr. Swan's testimony submitted to the joint hearings on nutrition monitoring legislation held on September 21, 1989:

AMERICAN ACADEMY OF PEDIATRICS

AMERICAN ASSOCIATION OF RETIRED PERSONS

AMERICAN COLLEGE OF PREVENTIVE MEDICINE

AMERICAN DIETETIC ASSOCIATION

AMERICAN HEART ASSOCIATION

AMERICAN INSTITUTE OF NUTRITION

AMERICAN PUBLIC HEALTH ASSOCIATION

ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH

BREAD FOR THE WORLD

FOOD AND RESEARCH ACTION CENTER

INSTITUTE OF FOOD TECHNOLOGISTS

NATIONAL CONSUMER LEAGUE

NATIONAL OSTEOPOROSIS FOUNDATION

PUBLIC VOICE

SECOND HARVEST

SOCIETY FOR NUTRITION EDUCATION

MR. CHAIRMAN, THANK YOU FOR THIS OPPORTUNITY TO TESTIFY IN SUPPORT OF LEGISLATION THAT WOULD ESTABLISH A NATIONAL NUTRITION MONITORING SYSTEM. MY NAME IS PATRICIA B. SWAN AND I AM A PROFESSOR IN THE DEPARTMENT OF FOOD SCIENCE AND NUTRITION AND ASSOCIATE DEAN OF THE GRADUATE SCHOOL AT THE UNIVERSITY OF MINNESOTA. I AM ALSO A MEMBER OF THE COUNCIL OF THE AMERICAN INSTITUTE OF NUTRITION AND THE FORMER CHAIR OF THE JOINT PUBLIC AFFAIRS COMMITTEE OF THE AMERICAN INSTITUTE OF NUTRITION AND THE AMERICAN SOCIETY FOR CLINICAL NUTRITION.

MY TESTIMONY TODAY IN SUPPORT OF THIS LEGISLATION IS IN KEEPING WITH THE POSITION OF THE GOVERNING COUNCILS OF THE AMERICAN INSTITUTE OF NUTRITION AND THE AMERICAN SOCIETY FOR CLINICAL NUTRITION, BOTH OF WHOM HAVE PASSED RESOLUTIONS IN SUPPORT OF A NATIONAL NUTRITION MONITORING SYSTEM. MY SPECIFIC COMMENTS ARE BASED ON A STATEMENT PREPARED BY OUR JOINT PUBLIC AFFAIRS COMMITTEE. THESE TWO SOCIETIES ARE THE MAJOR PROFESSIONAL ORGANIZATIONS FOR NUTRITION SCIENTISTS IN CLINICAL, EDUCATIONAL AND RESEARCH INSTITUTIONS IN THE UNITED STATES. COLLECTIVELY OUR MEMBERS REPRESENT THE PREDOMINANT EXPERTISE IN THE FIELD OF NUTRITION SCIENCE.

MY TESTIMONY HERE TODAY IS ALSO SUPPORTED BY SEVERAL OTHER PROFESSIONAL SOCIETIES AND ORGANIZATIONS THAT STRONGLY FAVOR PASSAGE OF LEGISLATION TO ESTABLISH A NATIONAL NUTRITION MONITORING SYSTEM. THESE GROUPS ARE LISTED ON THE ATTACHED PAGE. OUR PRIMARY REASON FOR SUPPORTING NUTRITION MONITORING LEGISLATION IS OUR STRONG OPINION THAT CURRENT INFORMATION ABOUT THE NUTRITIONAL STATUS OF OUR POPULATION AND THE NUTRIENT CONTENT OF OUR FOOD IS INSUFFICIENT; TO IMPROVE THAT INFORMATION THE UNITED STATES NEEDS A NATIONAL NUTRITION MONITORING SYSTEM. NO SUCH SYSTEM CURRENTLY EXISTS. SUCH A SYSTEM IS VITAL TO OUR UNDERSTANDING OF THE HEALTH OF OUR NATION. WE NEED BETTER INFORMATION ON HOW WE USE FOOD IN THIS COUNTRY, HOW OUR USES OF FOOD ARE CHANGING, WHAT IS IN THAT FOOD, AND THE GENERAL NUTRITIONAL STATUS OF THE AMERICAN PEOPLE. SUCH

INFORMATION WILL ALLOW US TO IMPROVE THE EFFECTIVENESS OF OUR FOOD PROGRAMS AND NUTRITION EDUCATION EFFORTS. GOOD FOOD CHOICES ARE BASIC TO OUR NATION'S HEALTH. SURELY THOSE CONCERNED ABOUT OUR NATION'S HEALTH, SUCH AS YOU WHO ARE POLICY-MAKERS IN THE CONGRESS, NEED TO HAVE ACCURATE AND TIMELY INFORMATION ON WHICH TO BASE THAT POLICY AND THE NATION NEEDS TO COMMIT THE RESOURCES TO OBTAIN THAT INFORMATION.

THESE ARE EXCITING TIMES IN NUTRITION SCIENCE. WE HAVE IDENTIFIED SOME VERY IMPORTANT RELATIONSHIPS BETWEEN DIET AND HEALTH AND WE NOW KNOW WAYS IN WHICH GOOD FOOD CHOICES WILL LESSEN THE RISK OF DISEASE. WE SHOULD BE ABLE TO EMPLOY OUR NEW UNDERSTANDING TO IMPROVE THE HEALTH OF THE NATION AND THEREBY REDUCE THE NATION'S MEDICAL COSTS. WE ARE LIMITED IN OUR ABILITY TO DO SO, HOWEVER, WHEN WE HAVE INCOMPLETE AND OUTDATED INFORMATION ABOUT THE NUTRITIONAL STATUS OF OUR POPULATION.

A SECOND REASON WE SUPPORT THIS LEGISLATION IS THAT WE BELIEVE THAT INDIVIDUAL PROGRAMS NOW CARRIED OUT BY THE FEDERAL GOVERNMENT, IF BETTER COORDINATED, COULD PROVIDE MUCH MORE USEFUL INFORMATION THAN THEY NOW DO. MANY OF THE COMPONENTS OF A NATIONAL SYSTEM ALREADY EXIST, BUT THEY NEED TO BE COORDINATED IF THEY ARE TO CONTRIBUTE TO A NATIONAL NUTRITION MONITORING SYSTEM. CHIEF AMONG THESE COMPONENTS ARE THE HEALTH AND NUTRITION EXAMINATION SURVEY CONDUCTED BY THE DEPARTMENT OF HEALTH AND HUMAN SERVICES AND THE NATIONWIDE FOOD CONSUMPTION SURVEY CONDUCTED BY THE DEPARTMENT OF AGRICULTURE. SEVERAL OTHER COMPONENTS, SUCH AS THE TOTAL DIET SURVEY OF THE FOOD AND DRUG ADMINISTRATION AND THE NUTRIENT DATA BANK OF THE DEPARTMENT OF AGRICULTURE, EXIST AMONG THE PROGAMS OF THESE TWO DEPARTMENTS AND TO A LESSER EXTENT WITHIN SEVERAL OTHER AGENCIES OF THE FEDERAL GOVERNMENT. A REPORT FROM THE NATIONAL ACADEMY OF SCIENCES HAS RECOMMENDED WAYS IN WHICH COORDINATION MIGHT IMPROVE THE VALUE OF THESE PROGRAMS. SIMILARLY, THE JOINT NUTRITION MONITORING EVALUATION COMMITTEE, REPORTING TO DHHS AND USDA IN 1987, RECOMMENDED WAYS TO IMPROVE INFORMATION

ABOUT THE NUTRITIONAL STATUS OF OUR POPULATION THROUGH COORDINATION OF EXISTING GOVERNMENT PROGRAMS. IN JULY OF THIS YEAR, NUTRITION MONITORING IN THE UNITED STATES: AN UPDATE REPORT ON NUTRITION MONITORING WAS COMPLETED BY THE LIFE SCIENCES RESEARCH OFFICE OF THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY. THAT REPORT SUPPORTED THE RECOMMENDATIONS MADE IN THE EARLIER REPORT BY THE JOINT NUTRITION MONITORING COMMITTEE AND THAT BY THE NATIONAL ACADEMY OF SCIENCES AND, IN ADDITION, MADE SOME FURTHER RECOMMENDATIONS FOR IMPROVEMENT. THESE RECOMMENDATIONS NEED TO BE MANDATED IN LEGISLATION SO THAT THEIR IMPLEMENTATION WILL BE ASSURED.

A THIRD REASON FOR SUPPORTING NUTRITION MONITORING LEGISLATION IS SO THAT RESPONSIBILITY FOR THE NATIONAL COORDINATION OF NUTRITION MONITORING WILL BE ASSIGNED TO A SPECIFIC INTERAGENCY BODY. ALTHOUGH THOSE RESPONSIBLE FOR THE SURVEYS MENTIONED ABOVE HAVE EXPRESSED A DESIRE TO COORDINATE THEIR PROGRAMS, AND ALTHOUGH THEY HAVE PRESENTED PLANS TO THE CONGRESS AND HAVE ESTABLISHED AN INTERAGENCY COMMITTEE FOR ACCOMPLISHING THIS COORDINATION, TO DATE WE HAVE SEEN NO DATA RESULTING FROM COORDINATED EFFORTS NOR HAVE WE SEEN IMPROVEMENT IN THE TIMELINESS WITH WHICH DATA ARE REPORTED OR THEIR AVAILABILITY TO USERS. WE BELIEVE THIS IS DUE, IN PART, TO THE FACT THAT COORDINATION HAS NOT BEEN MANDATED IN LEGISLATION AND NO ONE PERSON OR GROUP HAS THE RESPONSIBILITY FOR COORDINATION. THERE ARE MANY NATURAL OBSTACLES TO SUCH COORDINATION AMONG DEPARTMENTS. SOMEONE HAS TO ASSUME THE RESPONSIBILITY FOR OVERCOMING THESE OBSTACLES. WE HAVE CEASED TO BELIEVE THAT TIMELY AND EFFECTIVE COORDINATION WILL COME ABOUT SIMPLY BECAUSE SOME INDIVIDUALS WITHIN THE MAJOR PROGRAMS VOLUNTARILY PARTICIPATE IN PERIODIC INTERAGENCY MEETINGS.

A FOURTH REASON FOR SUPPORTING THIS LEGISLATION IS TO OBTAIN A PERIODIC ASSESSMENT OF WHAT IS KNOWN, AND WHAT MORE WE NEED TO KNOW, REGARDING THE NUTRITIONAL STATUS OF THE POPULATION AND CERTAIN VULNERABLE GROUPS WITHIN IT, SUCH AS INFANTS AND OLDER ADULTS. POLICY MAKERS DO NOT OFTEN HAVE THE TIME OR

THE EXPERTISE TO COLLATE AND ANALYZE THE INFORMATION THAT COMES FROM NUTRITION MONITORING NOR TO EVALUATE WHAT IT SAYS ABOUT THE NUTRITIONAL STATUS OF THE AMERICAN PEOPLE. PERIODIC REPORTS BY EXPERTS NOT DIRECTLY CONNECTED WITH THE FEDERAL PROGRAMS SHOULD BE REQUIRED. THESE REPORTS SHOULD COLLECT AND SUMMARIZE OUR CURRENT KNOWLEDGE, AND SHORTCOMINGS IN THAT KNOWLEDGE, IN A FORM THAT IS USEFUL TO POLICY MAKERS, PUBLIC HEALTH OFFICIALS, NUTRITION EDUCATORS, AND THOSE WHO HAVE RESPONSIBILITY FOR FOOD PROGRAMS. IN ADDITION, THOSE WHO HAVE RESPONSIBILITY FOR THE MONITORING PROGRAMS SHOULD ALSO BE REQUIRED TO SUMMARIZE AND EVALUATE THEIR FINDINGS.

OTHER IMPORTANT FEATURES OF THE PROPOSED NUTRITION MONITORING LEGISLATION INCLUDE ASSISTING THE STATES WITH THEIR MONITORING CAPABILITIES, THE USE OF NON-GOVERNMENTAL EXPERTS TO CONTRIBUTE TECHNICAL ADVICE TO IMPROVE THE SYSTEM, AND RESEARCH TO IMPROVE OUR ABILITY TO MONITOR THE NUTRITIONAL STATUS OF A POPULATION AND TO IMPROVE OUR KNOWLEDGE OF THE NUTRIENT COMPOSITION OF FOOD. SEVERAL STATES ARE NOW CARRYING OUT THEIR OWN NUTRITION MONITORING PROGRAMS, OR AT LEAST THEIR OWN NUTRITION SURVEYS. A FEDERAL-STATE PARTNERSHIP IN THESE EFFORTS WOULD BENEFIT BOTH THE STATES AND THE FEDERAL GOVERNMENT. AT THE VERY LEAST THE FEDERAL PROGRAMS MIGHT HELP TO IDENTIFY THE MOST RELIABLE METHODS FOR NUTRITION MONITORING. EVEN BETTER WOULD BE COORDINATION THAT PERMITS COMPARISON BETWEEN STATE AND FEDERAL MONITORING PROGRAMS. OUR ABILITY TO MONITOR THE NUTRITIONAL STATUS OF A POPULATION IS CURRENTLY LIMITED BY LACK OF INEXPENSIVE, RELIABLE AND EFFECTIVE METHODS TO ASSESS WHAT PEOPLE EAT AND THEIR NUTRITIONAL STATUS. THERE IS A SERIOUS AND PRESSING NEED FOR RESEARCH TO IMPROVE OUR CURRENT METHODS AND TO DEVELOP NEW AND BETTER ONES. THIS NEED HAS BEEN HIGHLIGHTED BY RECENT REPORTS FROM THE NATIONAL ACADEMY OF SCIENCES ON DIET AND HEALTH AND THE SURGEON GENERAL ON NUTRITION AND HEALTH.

FINALLY, PROPOSED LEGISLATION REQUIRES THAT THE SECRETARIES OF AGRICULTURE AND HEALTH AND HUMAN SERVICES PUBLISH DIETARY GUIDELINES EVERY FIVE YEARS AND

PROMOTE THOSE GUIDELINES WHEN CARRYING OUT FEDERAL FOOD, NUTRITION AND HEALTH PROGRAMS. WE STRONGLY FAVOR THE DEVELOPMENT OF DIETARY GUIDANCE BY THE FEDERAL GOVERNMENT AND WE BELIEVE IT IS IMPORTANT THAT THE GOVERNMENT BE AS CONSISTENT AS POSSIBLE WHEN PROVIDING NUTRITION INFORMATION TO THE AMERICAN PEOPLE. TO THIS END, THE PROVISION FOR REVIEW OF ANY PROPOSED DIETARY GUIDANCE SHOULD HELP IN ASSURING THAT SUCH GUIDANCE WILL BE CONSISTENT AND BASED ON THE BEST SCIENTIFIC EVIDENCE AVAILABLE. WE WOULD NOT FAVOR, HOWEVER, ALLOWING ONE DEPARTMENT TO VETO ADVICE FROM ANOTHER.

I APPRECIATE THIS OPPORTUNITY TO TESTIFY IN SUPPORT OF NUTRITION MONITORING LEGISLATION. THE GROUPS WHOSE VIEWS I REPRESENT TODAY WISH TO EXPRESS THEIR APPRECIATION TO YOU FOR YOUR PAST SUPPORT OF THIS LEGISLATION AND YOUR CONTINUING INTEREST IN ESTABLISHING A NATIONAL NUTRITION MONITORING SYSTEM. WE STAND READY TO SUPPORT THIS EFFORT IN EVERY APPROPRIATE MANNER.

THANK YOU.

BIOGRAPHY

PATRICIA B. SWAN is a professor in the Department of Food Science and Nutrition and Associate Dean of the Graduate School of the University of Minnesota where she has been a member of the faculty since 1964. She received her undergraduate degree from the University of North Carolina at Greensboro and her master's and doctoral degrees (Ph.D.) from the University of Wisconsin with majors in biochemistry and nutrition. During her graduate studies she investigated the vitamin B6 requirements of men and the metabolism of large amounts of selenium in animals.

After completing her doctoral work, Professor Swan spent a post-doctoral year in the Kennedy Laboratories at Wisconsin, working on animal models of genetic errors which result in mental retardation. She then came to the University of Minnesota where she spent a year doing post-doctoral research in the Department of Biochemistry before joining the nutrition faculty. Since she joined that faculty she has taught both undergraduate and graduate courses in human nutrition, and has directed research on amino acid metabolism, protein synthesis, and on the ways in which diet affects the metabolism of muscles. Her current scholarship emphasizes the history of nutrition research in the United States. She is the author or co-author of over 50 scientific and technical publications.

Professor Swan is an active member of the American Institute of Nutrition, where she has served a term as secretary and currently serves on the Board of the Federation of American Societies for Experimental Biology. She also serves as a member of the Human Nutrition Board of Scientific Counselors for the Department of Agriculture and as a member of the editorial board of the Journal of Nutrition .

As of October 1, 1989 Dr. Swan will be leaving the University of Minnesota to assume the position of Vice Provost for Research and Advanced Studies and Dean of the Graduate College at Iowa State University.

STATEMENT OF THE ASSOCIATION OF STATE AND TERRITORIAL PUBLIC HEALTH NUTRITION DIRECTORS (ASTPHND)

AN AFFILIATE ORGANIZATION OF THE
ASSOCIATION OF STATE AND TERRITORIAL
HEALTH OFFICERS

ON

THE NATIONAL NUTRITION MONITORING AND
RELATED RESEARCH ACT OF 1989

HR 677, HR 1608, S253

FOR THE SUBCOMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH, AND
FOREIGN AGRICULTURE
AND
SUBCOMMITTEE ON DOMESTIC MARKETING, CONSUMER RELATIONS AND NUTRITION
COMMITTEE ON AGRICULTURE

AND

SUBCOMMITTEE ON SCIENCE, COMMITTEE ON AGRICULTURE, RESEARCH, AND TECHNOLOGY
COMMITTEE ON SCIENCE, SPACE, TECHNOLOGY

SUBMITTED BY

AGNES W. HINTON, RD, MS
DIRECTOR, NUTRITION SERVICES
MISSISSIPPI STATE DEPARTMENT OF HEALTH
JACKSON, MISSISSIPPI
PRESIDENT, ASTPHND

21 SEPTEMBER 1989

The Association of State and Territorial Public Health Nutrition Directors, an organization of nutrition professionals representing the health agencies of the 56 states, territories, districts, and commonwealths, strongly supports HR 677 and S. 253, The National Nutrition Monitoring and Related Research Act of 1989. This legislation will provide this country a coordinated, integrated, and timely system for nutrition monitoring.

The need for this legislation has only intensified since 1984 when it was first introduced in the House, following six years of joint oversight hearings on nutrition research and monitoring. There has been a steady increase in the competition for limited state and federal resources, and a need to allocate those resources in an equitable manner. Timely, complete, and reliable data is essential to the task of developing policies and programs to meet the changing health needs of the nation. Wile we do recognize and appreciate the efforts of the Department of Health and Human Services (DHHS) and the U.S. Department of Agriculture (USDA) to work with one another and with those of us in State Departments of Health, these efforts do not preclude the need for this legislation. Even greater cooperation and coordination is essential, and even the current commendable progress could easily be eradicated by a change in administration of key personnel in lead agencies.

I will describe some of the responsibilities, problems and needs of State and Local Health Departments in regard to food and nutrition data that will be supported by this legislation. I will also address some of the specific provisions of the bill.

We in the States have an increased responsibility for planning programs and services to meet the needs of our citizens, and very little information on which to base those decisions. Health Departments are charged with the responsibility for promoting and protecting the health of the public including the control of communicable disease, control of chemical contamination, and of alleviating chronic health and social problems. The expectations of state and local health departments have also been expanded during this current administration as the "New Federalism" has shifted the emphasis for planning and priority setting to the states.

There has been a steady increase in the competition for limited state and federal resources, and a need to allocate those resources in an equitable manner. Timely, complete and reliable data is essential to our task of developing policies and programs to meet the changing health needs of our citizens. Over the past several years, we have been faced with making decisions about the magnitude and severity of nutritional problems within our jurisdictions without good nutritional data on which to base decisions. Massachusetts, New York and Texas have been able to conduct limited state nutrition surveys to determine specific nutrition problems and have used the data to secure state funding to expand their WIC programs. With limited resources, most states cannot undertake comprehensive surveys and must continue to rely on the federal government for leadership in the collection and interpretation of nutrition status data.

We need reliable, standardized data that is readily accessible to the states. The core of the current National Nutrition Monitoring "system" consists of the National Health and Nutrition Examination Survey (HANES) and National Food Consumption Survey (NFCS), with, depending on who is counting, up to 30 other data sources. The majority of these data sets exists independently of one another. Within this mountain of data, there is some overlap, some gaps, many inconsistencies and virtually no way to put any combination together to get a complete picture of the dietary habits and nutritional status of the American public. We in the states need a system that coordinates the studies so that the results can be used to portray an accurate picture of our citizens and identify those with problems who are in need of services. With such data, we can develop programs that target specific problems.

We need more specific information about groups who are most vulnerable to nutrition problems. The current sampling methods used for most of these studies results in undersampling those most likely to have nutrition problems: the very young, the elderly, the poor, especially the homeless, and certain minority groups. While we recognize the importance of establishing "norms", we must also advocate for a system that documents nutritional problems in our country so that we can target resources appropriately. We applaud the inclusion in this legislation of the requirement to develop and plan for the continuous monitoring of these high risk groups.

I cannot overstate the importance of timely information. When the 1990 Nutrition Objectives were published in 1980, Hanes I data, collected from 1971-74, was used to set the baseline levels. When data from HANES II, 1976-80, became available, it was clear that significant changes had already occurred in several parameters (average cholesterol levels had decreased and there had been a 3-4% increase in obesity). We are now writing Objectives for the Year 2000, and HANES III is just underway. Once more, we are writing objectives with an inadequate data base. The same thing occurs when we try to set goals at the state level, and as I'm sure you all understand, it is difficult to convince legislators that they should fund programs to meet needs that we cannot accurately describe.

We must know trends in nutritional status and dietary habits. The population of the United States represents the proverbial "moving target".

The new USDA "Continuing Food Consumption Survey" has addressed this need, but we need the same type of information on health status, food program utilization and composition of the food supply. This might have allowed us to predict the increase in use of emergency food programs over the past several years, and to have instituted programs to alleviate inadequate access to food problems earlier.

There is a critical need for new, cost-effective methods for monitoring trends in food consumption and nutritional status. There has been little work by either DHHS or USDA to develop shorter, cheaper methods that we could then use in our states to supplement the national studies. The first national food consumption survey was done in the 30's and both USDA and DHHS have participated in numerous surveys ever since. Yet even with the telephone and microcomputers available, we still do not have easy to use, accurate, economical methods for determining what people eat. The State of California recently developed a telephone survey to determine eating habits. It cost $50,000 to develop, but they do not have the evidence they need to be assured of the validity of their work.

Perhaps our greatest need in the states is for technical assistance, the sharing of the knowledge and expertise of those who work on these federal projects with our staffs. At the federal level, there are the resources to develop new methods and equipment and to teach us new ways of looking at our work. The demand for statistical support is great, and our resources are limited. Few of us can afford the luxury of statisticians who are experts in any one field, such as nutrition, nor are they readily available.

Over the years, the federal agencies have become much more open and have shared vast amounts of data with us, but we need more than copies of computer tapes and printed reports. We would like assistance in interpreting and using the data, in setting up local data bases, and supplementing the national data. The nutrition staff at the Centers for Disease Control have been particularly helpful in assisting us to set up various surveillance projects including Pediatric Surveillance, Pregnancy Surveillance, the Behavioral Risk Factor Surveillance Survey, and Surveillance of Severe Pediatric Undernutrition. This type of assistance from NCHS, USDA and the other federal agencies is also needed. The potential for sharing resources and data between the states and Federal government is extensive. The plan required by this legislation would give a great deal of impetus to this sharing.

Finally, as users of nutrition data, we need to participate in the planning of the various studies and surveys. We would like to have the opportunity to propose the questions that we believe need to be answered in order to plan effective programs. We would like to participate in the setting of priorities and making of decisions about how surveys are conducted, the type of data to be gathered, and most critically, how that information will be distributed. At the present time, we are unaware of any plan for the distribution of the millions of dollars worth of data that will be collected during HANES III. If the practice used in the past is followed, data tapes will be made available to academic institutions for analysis. Reports will come years later as masters theses and doctoral dissertations are finally completed. Vast amounts of the data may never be distributed if no one is particularly interested in reviewing and publishing it.

Even without additional funding, this proposed legislation has several features that make it especially important to State Health Departments. First is the centralization of Nutrition Monitoring activity with the requirement for a written plan and regular reports to Congress; the provision of technical support to the states; inclusion of a program of grants to states; the requirement for a budget for nutrition monitoring activity; and finally, the requirement for an advisory committee to the program.

We believe that the coordination of nutrition monitoring activity at the federal level is extremely important in solving some of the problems we have experienced using data from several different sources. At a minimum, this activity should make it easier to understand how and when to use each of these surveys. We expect that with a central plan, there will be a focal point or clearinghouse available to advise us on data items available and their use. We also expect that this plan will emphasize gaps in the current network of services such as the impact of the various food assistance programs, and the role of attitudes, motivation and skill in determining food habits. A written plan will let us know what we can count on. It will help immensely in knowing what studies are underway and when we can expect reports.

At the present time, nutrition monitoring is a discretionary item in each agency's budget. This makes it an easy target in times of budgetary constraint. Making it a line item will clarify to Congress and the public just how much is allocated, and what value we get for our money. Again, it will provide some assurance that data we are counting on will be forthcoming.

We especially appreciate the inclusion of the National Nutrition Monitoring Advisory Council in this legislation. It provides the first formal opportunity for users of nutrition monitoring data to provide input and guidance to the federal agencies about their needs. It is vital that the "end users" in public health be included as well as the academicians who are typically viewed as the users of this data.

In further support of this legislation, I would like to cite the findings and recommendation of four study groups. The first, the President's Task Force on Food Assistance in 1984, upon discovering there was no data to assess whether or not nutritional status in this country had worsened, recommended:

1. Improve the major surveys;
2. Expand uniform state reporting;
3. Develop new measurement tools; and,
4. Conduct smaller more frequent surveys to give more current information

The second, the progress report of the Joint Monitoring Evaluation Committee entitled "Nutrition Monitoring in the United States" and issued jointly by USDA and DHHS in July, 1986 made 14 recommendations in four categories:

1. Improve information exchange between data users and gatherers;
2. Increase the use of the data collected under the national nutrition monitoring system;
3. Improve the methods and techniques for gathering information and assessing nutritional status; and,
4. Increase resources for the National Nutrition Monitoring System.

The Federation of American Societies for Experimental Biology in their 1985 midcourse review of progress toward the National Nutrition Objectives for 1990 found little evidence of progress and concluded that there was inadequate data to monitor or determine whether progress was being made. The National Agricultural Research and Extension Users Advisory Board in their 1985 report to the President and Congress also called for an improved National Nutrition Monitoring System.

Additionally, the July, 1988 Surgeon General's Report on Nutrition and Health called for the establishment of a Nutrition Surveillance System that would enhance the monitoring of population specific and state specific trends in the occurrence of nutrition related risk factors and conditions.

Diet and Health: Implications for Reducing Chronic Disease Risk, released by the National Research Council in February, 1989, calls for the development of better methods to monitor and quantify dietary exposures in human populations, and development of better methods for data analysis for epidemiological studies.

Both these very current recommendations underscore the need for improved coordination of current surveys.

There is little evidence of progress in solving any of these problems or meeting these recommendations. We continue to believe that this legislation is needed, and needed now, in order to get nutrition monitoring on track and to have a true system in this country, rather than a collection of activities carried out by several agencies as we do now. I would like to again emphasize that we in the states do not expect the federal government to act alone. We stand willing to work with the administration in planning and developing a National Nutrition Monitoring System, helping to collect the data and to use and publicize the results.

We are aware that in addition to HR 677 and S.253, another nutrition monitoring bill, HR 1608, has been introduced. Unfortunately, many of the provisions of HR 677 and S.253, both previously passed by Congress, would be carried out very differently in HR 1608. As mentioned, our Association and our parent organization, ASTHO, have testified supporting nutrition monitoring since 1984. We have worked closely with modifications of the original bills, and it was partially because of our recommendations that the provisions for the Advisory Council were strengthened and the grants program for states and local governments was added. Unfortunately, HR 1608 contains no grants programs and no advisory council. Some of the problems that we see in HR 1608 include the following:

10 Year Plan: HR 677 lays out in considerable detail both the tasks needed for a comprehensive coordinated nutrition monitoring program and highlights some activities which have not been part of current efforts. HR 1608 provides more limited details on how the system is to operate and lacks specific components we consider critical to a comprehensive system.

Administrator: HR 677 provides that the Secretaries may appoint an administrator for nutrition monitoring, thereby providing a needed central focus and coordination. The appointment of such an administrator would provide a single individual responsible for seeing that the plan is implemented and the opportunity for improved Congressional oversight. The lack of accountability in the past has frustrated many of our members interested in seeing that a comprehensive, coordinated program was implemented. This central focus is not established in HR 1608, which gives no authority for such an appointment.

Methods Research: HR 677 requires that a grants program for methods research be established to provide ongoing support for the development of methods and related tools necessary for a successful nutrition monitoring program. While HR 1608 states that methods research is to be encouraged, no specific program is detailed. Since one of the weaknesses in the implementation of a nutrition monitoring program in the United States to date has been the lack of parallel ongoing methods research development to support it, the provision of a strong methods research component would seem most important.

Grants to State and Local Governments: As mentioned, HR 677 directs that a grants program be included to encourage and assist state and local governments in developing the capacity to conduct monitoring and surveillance of nutritional status, food consumption, and nutrition knowledge to enhance nutrition services within their jurisdiction. HR 1608 has no such program, but merely states that the plan should assist state and local entities in developing nutrition monitoring, with no mechanism defined to accomplish this.

Data Interpretation: HR 677 provides for independent interpretation of data analyses by contracting with a scientific body to do a comprehensive interpretation of the available data analyses performed by the agencies and to biannually publish a report on the nutritional status of the population and the nutritional quality of the food supply. HR 1608 provides for no such comprehensive interpretation of data, but provides that each department would contract with experts in nutrition data analysis for the analysis of their data. With each department contracting separately with numerous experts, it is unclear how the data would be comparable or how this data could be integrated into one analysis of nutritional status. This would seem to defeat the purpose of providing overall population data.

Report to Congress: HR 677 specifies that a biennial report would be sent to Congress which would include an evaluation of the progress of the program, summary of the results, evaluation of policy implications based on the analysis findings, the full report of the Council and an executive summary of the report of the scientific body. HR 1608 requires the Secretaries to contract with experts in nutrition data analysis affiliated with appropriate entities engaged in scientific research for analysis of data collected by their respective surveys. Each department is responsible for contracting for analysis of the data it collects and USDA has the added responsibility for analysis of all other federal agencies' nutrition monitoring data. Results of these analyses are to be contained in the annual report. Annual reports are reported to be burdensome to federal agencies and very limited new nutrition information would likely be available on an annual basis from the Nutrition Monitoring System.

Advisory Council: The rationale behind the Advisory Council provision of HR 677 is that the concerns and needs of various interest groups, data users, and policy makers are not being currently met. Providing regular input from a diverse group could help improve the effectiveness of nutrition monitoring. The bill is very specific about the membership of the Council to assure the appointment of individuals who represent a wide array of interests and perspectives. Our organization considers the advisory panel to be a key provision in this legislation, as it would provide the end-user input not currently adequately available to the Federal Agencies performing nutrition monitoring research and coordination.

HR 1609 states that the General Accounting Office, the Office of Technology Assessment, and the Inspector General are to evaluate objectives and their achievement. It is unclear to me how this relationship would work between two research arms of Congress and the Inspector Generals of two Executive Branch departments. Also, there is no requirement for scientific and technical advice to be provided as part [illegible] the evaluation.

Dietary Guidance: HR 677 requires [illegible] and joint approval of dietary guidance materials by both Secretaries, with procedures for one Secretary approval provided. HR 1609 requires review by and joint approval of both Secretaries of such materials, with one agency veto allowed. This option of one agency veto of dietary guidance materials has been considered and rejected in past Congresses, respecting the desire of each department to not be thus hindered. HR 1608 also does not require that the public be notified regarding actions related to dietary guidance materials. In the past decade, public comment on dietary guidance materials has become a means to air the controversies surrounding diet and disease relationships that are addressed in dietary guidance materials for the general public. Our Association strongly opposes one agency veto of dietary guidance materials.

Despite our reservations about the content of HR 1608, we continue our strong support of HR 677 and S253.

In summary, the discussion of the need for nutrition monitoring began in the early 1970's, and has been discussed in both houses of Congress almost every year since. The time for purposeful action is now. The American public is concerned both about nutrition problems that affect the nation's health and about limited resources available to intervene to counter those problems.

Federal, State and Local Health Agencies need timely information to make decisions. To date, the mechanisms designed to meet these needs have not produced the desired results. Nothing less than the passage of the National Nutrition Monitoring and Related Research Act in 1989, HR 677 and S253, will provide the national structure needed to achieve optimal nutritional health from our investment.

4284M:3

MISSISSIPPI
STATE DEPARTMENT OF
HEALTH

Alton B. Cobb, M.D., M.P.H.
State Health Officer

Reply To:
Agnes W. Hinton, RD, MS

P.O. Box 1700/2423 North State Street/Jackson, Mississippi 39215-1700/(601)960-7400

November 16, 1989

Representative Charles Hatcher
Chairman, Subcommittee on
Domestic Marketing, Consumer
Relations, and Nutrition
Committee on Agriculture
Room 1301, Longworth House
Office Building
Washington, D.C. 20515

Dear Representative Hatcher:

Enclosed find a response to the questions submitted to me regarding nutrition monitoring. If clarification is needed on any of the issues, please feel free to write or call me (601-960-7473).

The Association of State and Territorial Public Health Nutrition Directors is appreciative of the Committee on Agriculture's efforts to achieve passage of nutrition monitoring legislation, and encourage you to seek speedy enactment into law of this urgently needed act.

Sincerely,

Agnes W Hinton

Agnes W. Hinton, RD, MS
President, ASTPHND

AWH:k

Enclosures

1. **How do you use the data collected by the USDA and DHHS on the nutritional status of Americans? Where is it helpful and where can it be improved?**

   Currently available data is utilized in identifying major diet - related health problems to be addressed through program interventions. State-specific data available through the Centers for Disease Control (Pregnancy and Pediatric Nutrition Surveillance and Behavioral Risk Factor Surveillance data) are used for program planning, evaluation, and specific client follow-up and quality assurance measures. The CDC data is most helpful in state planning because it is state specific. Data from other systems presented regionally would be more helpful for planning and evaluation. Data from most dietary and health surveys are not coordinated, so results cannot be linked. Although efforts are being made to correct some of these methodological problems, information from current surveys will not be available for some time. The Expert Panel on Nutrition Monitoring (EPONM) in their 1989 Update Report recommended: (a) greater similarity in data collection methods, (b) sharing with data users studies on the effects of methodological differences, and (c) introducing common sociodemographic descriptors in all NNMS surveys.

   Additionally, some groups at high risk for nutritional differencies are currently excluded from most NNMS surveys, such as institutionalized elderly, the homeless, migrant workers, and native Americans on reservations. These are the populations that need to be surveyed to give a true picture of the nutritional status of the entire U.S. population. The following high risk groups, infants, children, pregnant and lactating women, and the elderly, are included in such small numbers that representative sample estimates are not available. Additionally, information about vitamin and mineral supplements and alcohol use needs to be improved.

2. **What benefits are gained through the issuance of the Dietary Guidelines for Americans by USDA and DHHS?**

   The Dietary Guidelines for Americans are broad principles that can be applied to most of the population. While quantification of the guidelines must be done on an individual basis, the guidelines are a useful framework upon which to base recommendations. They also provide useful principles to be used in menu planning for groups, such as in the school breakfast and school lunch programs, and could be applied to price support programs such as the government purchase of surplus farm commodities. The fact that the guidelines are issued jointly through USDA and DHHS is a unifying force in interagency nutrition education efforts, and helps present a consistent nutrition message to the public from the major federal agencies involved in nutrition programs.

3. **Has there been a problem in the past, or in the present, with dietary guidance issued by federal agencies? If so, can you give some examples?**

   Unlike the coordinated message of the Dietary Guidelines, most other dietary guidance issued by federal agencies is fragmented by disease states and is often confusing to the public. A central clearance process within DHHS for dietary guidance issued by any of the department's divisions could help unify publications, and increase public confidence in federal dietary guidance.

4. **Please describe specifically why you feel there is a need for nutrition monitoring legislation?**

   The current system does not provide necessary information on the nutritional status of the U.S. population on a timely basis. Current efforts are all too often uncoordinated, lack adequate accountability, are not timely, use nonstandardized assessment methodologies, and give inadequate attention to assessing high-risk groups and geographic areas. Timely, complete, and reliable data is needed by state and local government officials in order to allocate available resources in the best manner. Most states do not have the resources to conduct nutrition surveys on their own, and must rely either on data collected through the federal government, or require assistance in establishing their own data collection systems.

   We need more specific information about groups who are most vulnerable to nutrition problems, and we need current data. We must know trends in nutrition status and dietary habits, composition of the food supply, and food program utilization. States and local governments need technical assistance from federal sources in establishing their own systems or in applying available national data to their locality.

   Other major problems addressed through nutrition monitoring legislation include 1) methods research; 2) a central federal focus for the development, coordination, and implementation of strategy plan and program, 3) timely and continuous collection, analysis, and interpretation of data; 4) technology transfer mechanisms to assist and enhance efforts of state and local governments, and 5) a forum for obtaining recommendations from scientists and data users in the public and private sectors.

5. **How would you rate the effectiveness of interagency committees to enhance nutrition monitoring activities and the degree to which possible recommendations of advisory groups, such as the National Academy of Sciences, have been incorporated in plans, surveys, and the infrastructure necessary to enhance the nutrition monitoring system?**

   While the establishment in June, 1988 of the Interagency Committee on Nutrition Monitoring (ICNM) and the subsequent establishment of three working groups of the committee is highly commendable, to date ASTPHND has seen little concrete evidence of accomplishments of the Committee. The mandate of the ICNM is to achieve the goals of the National Nutrition Moonitoring System as stated in the 1987 ten year "Operational Plan for a National Nutrition Monitoring System." This plan still does not indicate 1) the resources needed 2) a commitment to request funds to implement the resources needed 3) the responsible agency for each activity 4) specific dates when the various activities will be completed 5) plans for methods research 6) nutrition monitoring activities of agencies other than HANES or NFCS or 7) a comprehensive, sequential and integrated plan. Given the current lack of a legislative mandate to establish a coordinated, comprehensive system and the current budgeting problems of the nation, it is unclear how this plan will be any more successful than the 1981 Implementation Plan, characterized by great shortfalls between plans and accomplishments.

The 1989 Expert Panel on Nutrition Monitoring (EPON) from the Federation of American Societies for Experimental Biology (FASEB) includes concurrence with the recommendations of the 1986 Joint Nutrition Monitoring Evaluation Committee and the 1984 Coordinating Committee on Evaluation of Food Consumption Surveys of the National Research Council, and states that most of the suggested changes were not reflected in the data available to their panel. Additionally, recommendations regarding needed improvements in the NNMS which are largely yet to be implemented have been made by the President's Task Force on Food Assistance (1984), the National Agricultural Research and Extension Users Advisory Board (1985), and are included in the Surgeon General's Report on Nutrition and Health (1988) and Diet and Health: Implications for Reducing Chronic Disease Risk, National Research Council (1989). Obviously there is a need for better implementation of the recommendations of advisory groups.

6. **You indicated the greatest need in the states is for technical assistance. Can you give some examples of the type of technical assistance needed, and is it a matter of technology transfer from federal to state, or is there a need to create knowledge and technology specific to the needs of the states?**

ASTPHND members need assistance with both technology transfers and assistance in creating state specific systems. We need assistance in interpreting and using available national data, and in setting up local data bases to supplement the national data.

Quoting from the FASEB EPONM report, Nationally representative surveys do not generate state or local-level data. Nonetheless, policy makers in the states and localities need to know how to use national data, the implications of national data in terms of the state or locality, and how to 'dovetail' state or local surveys more efficiently with national surveys. State and other officials who are responsible for implementation of the National Nutrition Objectives need ways to monitor status and progress in achieving these objectives. The Panel Encourages more interaction of Federal and State Data Collection activities and research on the value and validity of synthetic estimates for States and other localities". ASTPHND supports these recommendations.

An example of a federal agency currently providing this type of assistance is the Centers for Disease Control. Their staff, through cooperative agreements and technical assistance, have assisted states in establishing state specific systems which are consistent nationally so they are comparable, yet can yield data which can be disaggregated to the clinic, county, district, and state level. This type of assistance should be available from other federal agencies.

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NATIONAL CATTLEMEN'S ASSOCIATION
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NCA

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Testimony on Behalf of the

NATIONAL CATTLEMEN'S ASSOCIATION

regarding

National Nutrition Monitoring Legislation

before the

Subcommittee on Department Operations, Research and Foreign Agriculture
of the House Agriculture Committee

Subcommittee on Domestic Marketing, Consumer Relatins, and Nutrition
of the House Agriculture Committee

Subcommittee on Sciences, Research and Technology
of the House Science, Space and Technology Committee

submitted by

Patricia Adrian, Chairman
Food Policy and Public Affairs Committee

September 21, 1989

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The National Cattlemen's Association is the national spokesman for all segments of the beef cattle industry--including cattle breeders, producers and feeders. The NCA represents approximately 240,000 cattlemen. Membership includes individual members as well as 47 affiliated state cattle associations and 26 national breed associations.

NATIONAL CATTLEMEN'S ASSOCIATION
THE AMERICAN FARM BUREAU FEDERATION
THE AMERICAN MEAT INSTITUTE
NATIONAL BROILER COUNCIL
NATIONAL MILK PRODUCERS FEDERATION
NATIONAL PORK PRODUCERS COUNCIL
UNITED EGG PRODUCERS

THE ABOVE GROUPS HAVE INDICATED THEIR SUPPORT FOR PATRICIA ADRIAN'S TESTIMONY SUBMITTED TO THE JOINT SUBCOMMITTEE HEARING ON NUTRITION MONITORING HELD ON SEPTEMBER 21, 1989.

NUTRITION MONITORING TESTIMONY

Thank you for the opportunity to testify on proposed nutrition monitoring legislation. I am representing the National Cattlemen's Association and a coalition of leading agricultural producer groups.

We supported nutrition monitoring legislation in the last Congress, and we support such legislation in the 101st Congress.

We support nutrition legislation for two basic reasons:

(1) First, the legislation would provide for a continuing National Nutrition Monitoring System. Such a system is needed in order to know and to understand the nutritional health of our nation. We need to know how we use food and how our food choices are changing. We need to know the nutritional status of the different segments of our society. Those of us concerned about food and our nation's health, including nutrition policy makers in Congress and the executive branch, must have accurate and timely information on which to base policies and programs. No decision can be any better than the underlying information.

(2) Second, the legislation would require use by agencies of accurate nutrition and nutrient data information. Agencies would be required to work in a coordinated way and to "speak with one voice" on matters of nutrition, especially when making dietary recommendations.

We cannot have accurate and consistent nutrition and health advice unless all those issuing the information use the latest and most accurate data on the nutrient content of foods. Also, we cannot have accurate food and nutrient consumption survey information unless those running the surveys recognize and use accurate nutrient composition data.

We are concerned about potential health problems because of failure on the part of some to recognize and use all of the available data on nutrient needs and nutrient composition.

For example, we now know that many women, in efforts to cut back on fat intake, have reduced their red meat intake. They have not recognized that nutrient-dense red meat supplies relatively large amounts of biologically available iron and other essential nutrients. And they may be borderline or deficient in terms of iron intake. Computer analyses by USDA suggest that in order to meet essential nutrient requirements while reducing fat intake as commonly recommended, it may be necessary for many women particularily to increase, not decrease, their intake of lean meat.

I mention all of this to illustrate the need for continuing development and dissemination of information on the nutrient content of foods, and current food consumption trends, as well as diet and health relationships.

In the absence of nutrition monitoring legislation, what has happened? We have a good example, from 1984, of what can go wrong. The National Cancer Institute, using out-of-date information on the fat content of foods, published a pamphlet of dietary recommendations which would have misled the public in addition to doing livestock producers a great disservice. Fortunately, the Administration and Members of Congress intervened, and distribution of the error-filled pamphlet was stopped. Everyone agreed the pamphlet had to be reviewed by USDA before any more copies were distributed.

More recently, coordination within and among agencies and departments has improved. New data on the nutrient content of today's more closely trimmed beef will update USDA's Nutrient Composition Handbook 8-13, on beef. As soon as it is published, other agencies should use this information which more accurately reflects today's leaner, trimmer beef.

The Food and Agriculture Act of 1977, designated USDA as the lead department in nutrition matters, while Health and Human Services (HHS) oversees work on diseases. Relationships between certain diseases and diet have become a major focus of the National Institutes of Health (NIH). All of this work should be better coordinated, and proposed legislation could help accomplish such needed coordination.

USDA and HHS jointly develop the "Dietary Guidelines for Americans." The coordination of these two departments which make dietary recommendations for nutrition and health is appropriate and necessary. The Dietary Guidelines are especially important because they serve a dual purpose: giving practical dietary recommendations to the American public and providing a consensus document for nutrition policy makers. The Dietary Guidelines are to give advice to average healthy Americans on what and how they should be eating to stay in good health. These guidelines should reflect changes in the food supply, food buying trends and the nation's eating habits, while continuing to stress the implementation of sound nutrition principles. The "Dietary Guidelines for Americans" are for the population at large and for that reason should remain qualitative and not quantitative. Only qualitative guidelines encouraging sound nutrition or dietary principles can address a nation of people diverse in age, sex, physical size, familial history and energy expenditure. Moderation and variety can be implemented with greater ease by persons given advice and encouragement based on sound nutrition principles rather than quantification.

We select and eat foods. We do not eat percentages, nor do we consume nutrients in isolation. We eat foods and combinations of foods. The Dietary Guidelines for Americans can help Americans know how to select foods to build a better diet for their good health. We trust that the next edition of the "Dietary Guidelines for Americans" will contain such practical, easy to implement, information and advice which can help improve the American diet and thus, the health of our nation's people.

The USDA and DHHS coordination required to develop the "Dietary Guidelines for Americans" is simply an example of good government. And, Mr. Chairman, our support for national nutrition monitoring is simply to implement a process whereby coordination between government agencies be established with regard to nutrition monitoring and dietary advice. Except for that particular coordinated effort for the Dietary Guidelines between USDA and DHHS, there is not a mandated, formal mechanism for coordinating the work of those two departments. Although they have worked together more closely recently, there is not a mandated system ensuring continuous coordination.

Here are a few current examples of coordination: (1) Within USDA, a Dietary Guidance Working Group reviews dietary recommendations before they are issued, thus assuring that USDA speaks with one voice. (2) A USDA representative attends meetings of the dietary guidance subcommittee of the HHS Nutrition Policy Board, although this group does not review department materials prior to publication. (3) The NIH Nutrition Coordinating Committee has a subcommittee for nutrition education (under National Heart, Lung and Blood Institute leadership) which confers with USDA in order to ensure information accuracy. (4) Several departments and agencies have established a new Interagency Committee on Nutrition Monitoring.

All of these things can help achieve some of the objectives of nutrition monitoring legislation. But the achievements at this point depend primarily on the good will and efforts of individual agency personnel. We still do not have the formal mechanism and procedures that are needed to assure consistent and coordinated nutrition monitoring, development and across-the-board use of up-to-date nutrient composition information, and coordinated nutrition advice.

The long-term health and welfare of the public, not just the viability of agricultural producers, depend on Congress' passage of well designed nutrition legislation, and on the departments' and agencies' implementation of such legislation.

Thank you for your attention.

AARP

October 10, 1989

The Honorable Charles Hatcher
Chairman
Subcommittee on Domestic Marketing,
Consumer Relations, and Nutrition
1336 Longworth H.O.B.
Washington, D.C. 20515

Dear Chairman Hatcher:

The American Association of Retired Persons would like to express its support for legislation that would establish a comprehensive and coordinated national nutrition monitoring system. While the Association supports the general statement of the Nutrition Monitoring Coalition, presented on September 21, 1989, I would like to take this opportunity to emphasize some special concerns of older persons that we believe this legislation should address.

o **Age-sensitive Data Collection**
It is notable that, while the first two Health and Nutrition Examination Surveys (HANES) did not collect data on persons older than age 75, such data is currently being collected through HANES III. AARP applauds this change and believes it is important that other major survey instruments emulate this approach.

o **Recommended Daily Allowances (RDA's)**
Despite evidence that dietary intake can have a differential impact on older persons, the current RDA's for persons aged 50 and older are virtually the same as those for persons aged 23 to 50. More research is needed on appropriate RDA's for the older population, especially as the number of persons living to be 85 and older continues to grow.

o **Physiological/Social Factors and Nutritional Adequacy**
Physiological changes affect the nutritional status of older persons. Diminished sense of taste and smell can lead to lessened interest in food, and dental problems can make eating more difficult. Loss of mobility often makes it more difficult to shop for food and prepare meals. This can lead to eating foods that are easy or convenient to prepare, although they may not provide a balanced diet. In addition, older persons may not absorb nutrients from food as effectively as younger individuals.

Social factors such as loss of a spouse or friends or depression stemming from other life changes can lead to diminished appetite and poor diet. Older persons are disproportionate users of prescription drugs which often have negative interactions with foods and appetite. Again, improved research is needed in these areas.

American Association of Retired Persons 1909 K Street, N.W., Washington, D.C. 20049 (202) 872-4700

Louise D. Crooks *President* Horace B. Deets *Executive Director*

o **Diet, Income, and Food Assistance**
For Americans of all ages, poor diet is often linked to inadequate income. Low-income older persons are less likely than other age groups to participate in the Food Stamp Program -- the primary federal food assistance program for low-income Americans. Monitoring the nutritional status of low income persons is an important step toward developing more effective food assistance and nutrition education efforts.

The Association commends the efforts of the House Agriculture and Science Committees in focusing attention on the need for national nutrition monitoring. We look forward to working with the Congress in developing comprehensive, effective legislation. If you or your staff have further questions, please contact Larry White in our Federal Affairs Department at 728-4810.

Sincerely,

John Rother

John Rother
Division Director
Legislation, Research, and Public Policy

Bread for the World
A Christian Citizens' Movement in the USA

September 21, 1989

The Honorable Doug Walgren
2241 Rayburn HOB
Washington, D.C. 20515

Dear Congressman Walgren:

Bread for the World strongly urges you to pass H.R. 677, the National Nutrition Monitoring and Related Research Act of 1989, this year.

This is the tenth year Bread for the World has asked Members of Congress to act on much-needed nutrition monitoring legislation. Although there has been some progress in improving and coordinating nutrition monitoring efforts, government and private agencies still have to rely on data that is inadequate and outdated. We believe that legislation, and specifically H.R. 677, is needed in order to increase accountability and produce more timely nutritional data.

Bread for the World's particular interest in nutrition monitoring relates to the need for information about the adequacy of diets of low-income people. Without timely data on the extent of hunger, it is difficult to develop effective policies that will help end hunger.

In the absense of a congressional mandate, valuable time has been lost in developing and implementing a comprehensive plan to monitor the nutritional status of our citizens. The state and local nutrition monitoring efforts that have moved forward during this time also have not had the advantage of being coordinated with federal data gathering. This could have been possible within the plan outlined in H.R. 677.

As you know, the House and Senate passed a similar nutrition monitoring bill in the 100th Congress after extensive oversight hearings covering all aspects of nutrition monitoring. Unfortunately, it was pocket vetoed by President Reagan. That legislation as well as H.R. 677 has the support of a wide variety of organizations, including scientific, public health, religious, producer and industry groups.

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Relief and Development, Inc., Washington, D.C.
William H. Gray III
U.S. Representative from Pennsylvania
Vernon C. Grounds
President, Evangelicals for Social Action
Denver, Colo.
John L. Halvorson
Coordinator, World Hunger Program, Evangelical
Lutheran Church in America, Chicago, Ill.
William J. Harvey III
Executive Secretary, Foreign Mission Board
National Baptist Convention, USA, Philadelphia
Chuck Hassebrook
Center for Rural Affairs, Walthill, Neb.
Norma J. Kehrberg
Associate General Secretary, United Methodist
Committee on Relief, New York
Othal H. Lakey
Presiding Bishop, 2nd Episcopal District CME
Church, Cincinnati, Ohio
Martin M. McLaughlin
Consultant, Office of International Justice and
Peace, U.S. Catholic Conference, Arlington, Va.
P. Francis Murphy
Auxiliary Bishop of Baltimore
Maria Otero
Director, Washington Office of Accion/AITEC
Washington, D.C.
Irene B. Reid
Episcopal Supervisor (Alabama), The African
Methodist Episcopal Church, Birmingham, Ala.
Colleen Shannon
Coordinator, Presbyterian Hunger Program
Louisville, Ky.
Frederick Hilborn Talbot
Bishop, Ecumenical Officer, AME Church
U.S. Virgin Islands
Marian Towne
Common Council, Church Women United
Indianapolis, Ind.
Baldemar Velasquez
President, Farm Labor Organizing Committee
Toledo, Ohio
Betty Voskuil
Hunger Educator, Reformed Church in America
Holland, Mich.
Isabelle Watkins
BFW Activist, Atlanta, Ga.
Margaret M. Weber
BFW Coordinator, Detroit Metro Council
Jack Woodard
Episcopal Church Priest, Alexandria, Va.

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In November, we will be commemorating the 20th anniversary of The White House Conference on Food, Nutrition and Health. This historic conference made a strong plea for adequate nutrition monitoring. It would be appropriate for Congress to pass H. R. 677 as part of this commemoration.

Sincerely,

Arthur Simon
President

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health
National Cancer Institute
Bethesda, Maryland 20892

October 24, 1989

The Honorable Charles F. Hatcher
Chairman, Subcommittee on Domestic Marketing,
Consumer Relations, and Nutrition
House Committee on Agriculture
1301 Longworth House Office Building
Washington, DC 20515

Dear Mr. Hatcher:

On September 21, a joint hearing was held by the House Committee on Agriculture and the House Committee on Science, Space and Technology on H.R. 677 and H.R. 1608. The National Cattleman's Association presented a statement which contained a description of a purported problem with a National Cancer Institute publication on diet and cancer prevention. The National Cancer Institute wishes to submit for the record the following statement on this matter.

"Diet, Nutrition and Cancer Prevention: A Guide to Food Choices" was the first major diet pamphlet published by the National Cancer Institute (NCI). The booklet was developed by the Office of Cancer Communications (OCC) with technical assistance from the Diet and Cancer Program staff in the Division of Cancer Prevention and Control (DCPC), NCI. The manuscript was widely reviewed within NCI, the National Institutes of Health (NIH) and the Department of Health and Human Services (DHHS). It was also distributed for comment to a large number of food producers in the meat, dairy and wheat industries.

While the review process was ongoing, OCC was contacted by staff of the United States Department of Agriculture (USDA) who had been given a copy of the manuscript by one of the meat industry organizations. The USDA staff member said that USDA also had comments on the draft and NCI agreed to accept those comments.

In its review, USDA pointed out that some of the fat values attributed to certain foods were slightly higher than they should be. In development of the booklet, serving size information was provided by DCPC staff. However, unknown to NCI staff, USDA had recently reduced serving sizes for meats, thereby reducing the fat content per serving by a small amount. Because the changes had just been made, NCI, NIH and DHHS reviewers were unaware of them. As the booklet was still in manuscript form, the content was changed to reflect the new USDA standards prior to publication.

No intervention by the Administration or members of Congress was necessary to stop distribution. The booklet was revised prior to publication and was not distributed before the USDA changes were incorporated. A chronology of the booklet's development is attached.

Sincerely yours,

Dorothy A. Tisevich

Dorothy A. Tisevich
Legislative Liaison
National Cancer Institute

cc Julie Paradis